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DEVELOPMENT AND EVALUATION OF A CAREER AWARENESS PROGRAM FOR GRADE SIX ELEMENTARY SCHOOL STUDENTS

BY

© SUSAN HEATHER MACCULLOCH

A THESIS

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Development and Evaluation of a Career Awareness Program for Grade Six Elementary School Students submitted by Susan Heather MacCulloch in partial fulfillment of the requirements for the degree of Master of Education in Counselling Psychology.

Supervisor

Date 20 November 1979

The journey of a 1000 miles begins with one step.

- Lao Tsze

Dedicated, with love, to my parents
who taught me how to walk.

ABSTRACT

The development of more practically oriented curricula designed to prepare students for the working world, both in terms of living and making a living, is the goal of the career education movement. Based on developmental approach to career choice, career education strives to integrate basic career awareness principles into all subject matter at all levels of the education system.

The present study was concerned with introducing a career awareness program into a local elementary school in order to evaluate student interest, teacher receptiveness, and feasibility of program goals. Two programs were implemented for an eight week period on a bi-weekly basis. The first, developed by the author, was an activities-based program; the second, entitled "Bread and Butterflies" (Agency for Instructional Television, 1974), consisted of fifteen 15 minute videotape presentations, followed by class discussion. Both subjective and objective data were compiled for evaluation purposes.

Results of student and teacher evaluations submitted subsequent to program implementation, suggested that, overall, student interest level was high throughout the eight week program. Both students and teachers felt that the programs had provided positive learning experiences and were in favor of incorporating career awareness into the regular school curriculum. The goals of the program appeared to be feasible. Behavioral objectives, which reflected specific program goals, were met in 14 out of 16 cases.

A final objective of program evaluation was to assess the suitability of the Occupational Information Subtest of the Career Maturity Inventory for measuring knowledge of careers at the grade

six level. Lack of significant findings in this study suggested (1) that the item content of the test did not have direct relationship to what was presented in the program, and (2) that the subtest may not be sensitive enough to change initiated by short-term career education programs.

The study concluded with recommendations for program improvements and future research.

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CHAPTER I

RATIONALE FOR INVESTIGATION

Today's youth, more so than in any other generation, face an increasingly more complex and demanding work climate. Rapid technological change and specialization have accounted for an explosive expansion in the number of occupational opportunities available. Gradual relaxation of rigid occupational stereotyping has further broadened the range of career avenues. Coupled with this surge of vocational expansion is an increasing demand for more extensive ties between academic training and the practical application of that training. According to Hill and Luckey (1969) "education and employability have become so highly interrelated that the processes of decision-making regarding each must be seen as part of the same design." (p. 357) This statement has direct implications for educators. The old-fashioned notion that career decisions are miraculously made during the final years of high school is unrealistic. Students are calling for more relevance in their education: there is a need to know who they are, where they are going and how they are going to get there.

Advocates of the career education movement are critical of the present education system:

> Education has assumed too long that the best way to prepare pupils for the real world is to keep them apart from that world....The purpose of education simply cannot be more education. Education must be seen as preparation for <u>something</u> - both as preparation for living and preparation for making a living. (Hoyt, Pinson, Laramore & Mangum, 1973, p. 13).

Of central importance to the career education stance is the term "career", defined as "the totality of work done in one's lifetime"

(Hoyt et al, 1973). Implicit in this definition is the notion that "career" encompasses a variety of settings (home, school, community), roles (student, worker, parent), and events (job entry, marriage, retirement). Thus, "career" is a broad term and is not confined to a specific job or occupation (Gysbers, 1974; Mangum, Gale, Olsen, Peterson, & Thorum, 1977; Hoyt, Evans, Mackin, & Mangum, 1974; Bailey & Stadt, 1973; Bottoms & Sharpe, 1973).

Furthermore, "career" is viewed as a developmental process, paralleling that of human development (Mangum et al, 1977; Gysberg, 1974; Hoyt et al, 1974; Bottoms & Sharpe, 1973; Herr & Cramer, 1972). This process, labelled career development, occurs throughout one's lifetime and includes "the total constellation of events, circumstances, and experiences of the individual as he makes decisions about himself as a prospective and actual member of the work force" (Hoyt et al, 1974, p. 136). Career education, therefore, is the vehicle which facilitates career development. It is an educational process which helps individuals to develop awareness of their own unique interests, capabilities, and values as they apply to the world of work, to explore alternative occupations and careers available, and to knowledgeably plan and implement a career choice or combination of career choices (Hoyt et al, 1974; Bottoms & Sharpe, 1973; Mangum et al, 1977; Bailey & Stadt, 1973).

Since career development is assumed to begin at birth, career education cannot be the sole responsibility of the school. Hill and Luckey (1969) point out that "the experiences gained by the child during the early years of his schooling inevitably reflect, in their outcomes, the kind of early childhood, preschool life he lived in his

home and his immediate community" (p. 352). Career education, therefore, must include the contributions of the home and the community if it is to truly facilitate the developmental process. The school can, however, play a coordinating role among the other segments of society by providing a curriculum that invites parents and community workers to serve as resource people at all levels of a child's formal education. Magnum et al (1977) identify three stages of career education that roughly correspond to the elementary, junior high and senior high school levels. These are, respectively, career awareness, career exploration, and career preparation.

This study directs its attention to the first of these stages - career awareness. Until recently, there has been an obvious lack of career resources at the elementary school level, primarily because the perceptions and experiences of the elementary school child have been given little, if any, credit in directing the course of vocational discovery. With the emergence of the career education movement, educators, parents and the community at large are beginning to recognize that a child's occupational fantasies are based on very real perceptions of the working world, and that career attitudes and values have their roots in the early years of life (Herr, 1973).

Herr and Cramer (1972) contend that "by the time (children) have completed the first six grades of school, many of them have made tentative commitments to fields of work and to self-perceptions" (p. 143). Research in the area of career development has supported this claim. Nelson (1963) discovered that by grade three, children's attitudes toward occupations and levels of education were well-developed, and that occupational interest patterns were beginning to

emerge. Creason and Schilson (1970) found that all 121 grade six students in their sample were able to state their vocational preference and that only eight were unable to indicate reasons for their particular preference.

Although these studies indicate that children are able to state vocational preferences at an early age, the function of the elementary school is NOT to help children choose their future career roles. Rather, career education at the elementary level can help children develop attitudes toward the way people earn a living, and gain an appreciation and respect for the contributions of all working people. The child should be provided with experiences that will promote discovery of his own interests and talents. Understanding of personal strengths will help him gain a clearer perspective of self and will enhance more realistic life-planning strategies. The elementary school, therefore, can play a crucial role in the child's personal development by permitting him to nurture and accept a more realistic image of self in relation to the world of work.

Purpose of the Study

The purpose of the present study was to introduce a career awareness program into a local elementary school in order to evaluate student interest, teacher receptiveness, and feasibility of program goals. Two programs were implemented for an eight week period. The first, developed by the author, was an amalgamation of discussion material, experiential activities, and audio/visual presentations from a number of sources. "Bread and Butterflies - A Curriculum Guide in Career Development", developed by the Agency for Instructional Television (1974) was introduced as the second program. This project

consists of 15 fifteen minute television programs and a curriculum guide; the format used for implementation in this study was video presentation followed by discussion of relevant themes. In order to evaluate the programs, both subjective and objective data were compiled. However, since career awareness programs are relatively new to the elementary school scene, information about evaluations for this type of project was scarce; therefore, consideration will be given to the appropriateness of the measures used. This study will conclude with comments and recommendations for future program development and implementation.

CHAPTER II

REVIEW OF RELATED RESEARCH

Selected Career Development Theories: Implications for the Elementary School

A potentially effective career education program is built upon a solid rationale that includes a thorough understanding of the major tenets of career development theory (Bailey, 1975). From an educator's perspective, a solid theoretical base provides the framework for program development. Teacher's must be oriented to the basic notions of career development theory and made aware of practical implications if program implementation is to be a success (Hansen, 1974; Gysber, 1974). The purpose of the following section is to briefly summarize the main points of five career development theories, selected on the basis of their implications for career education at the elementary school level.

Ginzberg, Ginsberg, Axelrod and Herma Theory

Ginzberg, Ginsberg, Alexrod and Herma (1951) were among the first theorists to introduce a developmental approach to the question of occupational choice. They originally concluded that vocational choice is an irreversible process occurring over a minimum of seven years (more typically ten years), and characterized by a series of compromises the individual makes between his wishes and his possibilities. This process is divided into three major periods: Fantasy choice (ages 6 to 11); Tentative choice (11 to 18); Realistic choice (18 to 22).

The Fantasy period represents the child's attempts to "try on" a variety of adult situations by assuming make-believe work roles. Children's occupational "choices" presumably do not take into account realistic considerations such as ability, potential, and the time perspective. However, Fantasy choices do help the child move into the Tentative period where he gradually and systematically develops an understanding of his interests, capacities, and values. As a teenager, the individual passes through the final Transition sub-stage where he realizes the need to incorporate more realistic considerations; these can only evolve from additional experience. During the Realistic period, the individual continues to explore and assess a multitude of occupational factors, eventually working out a compromise between what he wants, based on the self knowledge he has acquired, and what opportunities are available to him.

The Ginzberg theory has clear implications for the elementary school. Because fantasy choices influence later realistic choices, an adult's response to a child's expressed "career choice" may help to determine the child's attitude toward different occupations. Therefore, parents and teachers should be aware of the impact that their reactions bear in determining the course of a child's career pattern. Furthermore, since children's choices are based on the knowledge and attitudes available to them, the inclusion of occupational information in the elementary curriculum may enrich their play experiences and ultimately broaden the range of possible choices during later stages of development.

Super

One of the most comprehensive theories of career development is that formulated by Donald Super (1957). In essence, he proposes that

career development is a continuous process in which an individual strives to develop and implement a self-concept. Self-concept formation begins at birth when the infant begins to recognize himself as a person distinct from yet similar to other human beings. Thus begins an exploratory process which evolves over a series of life stages. The self-concept attains stability as the individual becomes increasingly more aware of his interests, values, attitudes and behavior patterns. This generally occurs in late adolescence after the individual has had the opportunity to role-play and test his capacities against reality.

Super (1957) states that because people differ in abilities, interests, and personalities, they are qualified for many occupations. The occupation that one chooses depends upon his socioeconomic background, mental ability, personality and available opportunities; through a process of compromise between individual and social factors, the individual arrives at a vocational decision that enables him to be the type of person he perceives himself to be. Should he feel restricted by his career choice, or if his self-concept changes, he may change his occupation.

Because of the developmental nature of the theory, the initial life stages of Growth (birth to age 6) and Exploration (six to middle or late adolescence) are crucial in building the foundation of the self-concept. The Growth stage is a period of physical and psychological growth in which the initial attitudes and behaviors pertaining to the self-concept are formed. During the Exploratory stage, the individual becomes increasingly more aware of the important role that work will play in his life, and as he nears the end of the stage, he

begins to narrow his occupational choices to fit with his own concept of his abilities and interests.

Since the majority of the child's time will be spent in school during these critical periods of development, Super's theory underscores the need for a school program directed toward self-understanding and personal development. Coupled with the presentation of occupational information focusing on attitudes toward work, and how interests, abilities and values relate to it, this type of approach would foster more accurate self-concepts which, according to Super, would ultimately result in more realistic career choices.

Hoppock

Hoppock (1976) presents a "series of speculations" regarding vocational behavior. The major theme of his position is that occupations are chosen to meet emotional needs and particular values which may or may not be unconscious. The process of career development begins when the individual becomes aware that a number of activities or occupations are satisfying to these needs. The decision to enter a particular occupation reflects the individual's attempt to best fulfill his needs at that particular time. He may later change careers if his needs change or if the job no longer satisfies those needs.

Since Hoppock assumes that needs begin to develop from birth, the early experiences of the child form the framework of personal characteristics that will eventually determine career choice. In his fifth postulate he states:

> Career development progresses and occupational choice improves as we become better able to anticipate how well a prospective occupation will meet our needs. Our capacity thus to anticipate depends upon our knowledge of ourselves, our knowledge of occupations,

and our ability to think clearly. (p. 91)

In terms of implications for the elementary school, Hoppock's theory points out a need for curriculum materials aimed at fostering self-understanding and broader awareness of the world of work in order to strengthen children's capacity to anticipate their needs for vocational fulfillment.

Holland

John Holland (cited in Osipow, 1973) has proposed a theory of career choice based upon patterns of personal development and adjustment. Essentially, he states that individuals can be categorized as one of six types - Realistic, Investigative, Social, Conventional, Enterprising, and Artistic. These personality patterns correspond to six environments. In choosing a career, a person will attempt to match his self-conception of his personality with his stereotyped conception of jobs he feels are suited to his personality. Thus, Realistic types will seek employment in Realistic environments, etc. Dissatisfaction with vocational choice will occur if the individual chooses an inappropriate occupation because of a failure to understand himself accurately or because his occupational stereotypes are misconstrued.

Holland's theory has two implications for elementary school career awareness programs. First, since personality is assumed to be a developmental process, inclusion of exercises directed toward self-understanding and personal adjustment would help the child develop more accurate self-perceptions. Second, by providing accurate occupational information, children would begin to develop a clearer understanding of the occupational stereotypes which, according to Holland, are crucial to career selection.

Tiedeman and O'Hara

Tiedéman and O'Hara (cited by Shertzer & Stone, 1976) believe that a career significantly influences the total organization of the personality. Career development is defined "as the process of fashioning a vocational identity through differentiation and integration of the personality as one confronts the problem of work in living" (Shertzer & Stone, 1976, p. 331). They relate this process to Erikson's eight stages of man: each stage in development is characterized by a "crisis" which the individual must resolve. One's personal identity is ultimately attained in a career. Career choice is the result of the differentiation of occupational concerns as matters to be dealt with, followed by the integration of the differentiated concern into the total life pattern.

During the school years, a preliminary ego-identity is formed that is essential to successful job adjustment. The school provides children with the opportunity to activate the process of differentiation and integration through programs and activities designed to allow students to test themselves and achieve identity. Career programs at the elementary level would help children become aware of the important role that work will play in their lives; furthermore, since a career is considered to be the focal point of personal identity, occupational information during the elementary years may increase the child's chances of achieving a more complete personality organization (Bugg, 1969).

General Implications

Examination of the above outlined career development theories indicates a need for career awareness at the elementary school level.

Ginzberg et al, Hoppock, and Super emphasize the developmental nature of career decision-making, while Holland and Tiedeman & O'Hara imply it. A summary of the implications of each theory suggests two major trends in career awareness programs are necessary. The first requires provision of experiences to foster self-understanding and personal development. Activities designed to help children recognize and identify personal strengths, define their interests and develop positive communication skills are examples of what could be included in this type of program. A second area of focus in an elementary career awareness program should be on providing broad occupational information in order to expand children's awareness of the total range of opportunities available to them. Through role-playing, field trips and research, children should be able to better acquaint themselves with various work roles while simultaneously developing positive work values and attitudes. To summarize, each of the theories of career development reviewed in this chapter suggests that satisfying career choices are based on accurate understanding of self and the world of work. By providing opportunities to meet these needs at the elementary school level, the educational system will provide maximum assistance to students in making sound career decisions.

Factors Influencing Career Development

Early models of career guidance attempted to match a single trait, such as intelligence, with a particular occupation (Shertzer & Stone, 1976). As research into the process of career chioce grew, the study of occupational behavior began to attract attention from a variety of disciplines. Today, career development is accepted as involving an interaction of psychological, sociological, economic, physical, and

chance factors. Several of these variables will be discussed in the following section.

The Family

The family is generally recognized as the institution primarily responsible for nurturing career development (Ginzberg et al, 1951; Super, 1957; Hoppock, 1976; Luckey, 1974). It is through the family that the child normally encounters his first social experiences. Parents, siblings and significant others who frequent the home environment, provide the models with whom the child can identify. These people provide the support or discouragement for the decisions that the child makes and thus have an important influence on the formation of his motivational traits and behavioral styles (Hayes & Hopson, 1971).

Roe (1957), in her classic study of the relationship between early experience and vocational choice, concluded that methods of child-rearing played a crucial role in determining vocational value and attitude formation. She theorized that the over-protected child, for example, will lean heavily on the parent for gratification of his needs and tend to conform with parental occupational expectations, while the rejected child will display more aggressiveness and tend to prefer working with things as opposed to people.

Werts (1968), using a sample of 80,000 college freshmen, compared fathers' occupations with sons' career choices. His results suggested that certain occupational groups, including careers in medicine, social sciences, and physical sciences, are "inherited". He did not, however, postulate reasons as to why this occurs. In a study involving sixth graders, Creason & Schilson (1970) found that children tended to express occupational preferences higher than their fathers' occupational levels.

They speculate that the children's reasons for choosing higher status careers may reflect their awareness of salaries, status, prestige, education and skill relative to various occupations.

Work roles are also learned in the home. Since knowledge about an occupation is related to the contact that a person has with it, parents and others in the home generally provide children with their earliest exposure to the working world. The degree of exposure, however, will vary from home to home. Today's children rarely have the opportunity to see their parent "at work", much less work with them as was the case when the economy had an agricultural base. As a result, much of what they learn about parent's work roles is communicated through family discussion. Paul (cited by Hayes & Hopson, 1971) suggested that parental work attitudes are communicated at home in one of four ways: the 'silent' attitude where work is not discussed; the 'resentful' attitude where only gripes are openly aired; the 'participating' attitude where the positive aspects of the job are emphasized; the 'candid' attitude where all aspects of work, including advantages and disadvantages, are openly discussed. The home itself provides a miniature work setting. Mangum et al (1977) feel that if the child sees that every member of the family is sharing in the work load around the house, he will better understand the interrelationships of work and mutual benefit.

Sex Role Trends

In recent years, the traditional female role of wife and mother has expanded to include the role of worker. If, as previously assumed, exposure to parental work roles is the child's initial introduction to

the working world (Super, 1957; Mangum et al, 1977), then a breakdown in the traditional sex role division in adult occupations should be reflected by a decrease in sex role stereotyping from a child's point of view. Researchers, probing this hypothesis, have surprisingly, found traditional attitudes are still common among children. In a sample of first and second graders, Looft (1971) found that sex differences in vocational aspirations seem to be well established at an early age with boys perceiving a greater range of vocational opportunities open to them; girls, on the other hand, perceive a very narrow range of options centering around traditional helping professions such as nurse and teacher. Similar results were obtained by Siegel (1973), and by Schossberg & Goodman (1972) with kindergarten and sixth graders.

Iglitzen (1972) asked fifth graders to rank jobs on the basis of whether a "man", "woman", or "both" should do them. Stereotyping was common for both sexes with the majority of students feeling that men should be bosses, mayors, and lawyers, and that nurses and house clearners should be women. A second part of the study, geared at studying home and family patterns, found that fifth graders have sex-typed views of the home: women wash dishes, cook, dust, and scrub floors while men pay the bills, fix things, and weed the yard. Shepherd and Hess (1975) utilized Iglitzen's (1972) technique with four age groups (kindergarten, eighth grade, college and adult) in order to ascertain whether or not there is an emerging trend toward liberality by females. In each group with the exception of kindergarten, females were significantly more liberal than males; however, liberality decreased in the adult sample. The researchers speculate that the extreme conservatism of kindergarten children may reflect

parental adherence to traditional role models.

The School

The child's school experiences appear to have a significant impact on career development. Hoppock (1976) states that "the teacher's response to the child's expressed occupational choice may help to determine the child's attitude toward different occupations" (p. 251). Ceorgiandy (1976) hypothesizes that teachers consciously or unconsciously exhibit bias toward certain vocations, particularly blue-collar jobs. Through an in-service training program, he reported that participants admitted to increased awareness of the attitudes that they held toward various occupations.

A similar approach was taken by Jacobs (1972) in her study of sexism in the elementary school. She stressed the fact that teachers need to be aware of the expectations that they place on male and female students. Hilflinger (1978) compared sixth grade teachers' attitudes on sex roles with students' perceptions of occupational choice. Although the data failed to reveal a significant relationship between these two variables, when correlational procedures were used, a positive relationship was suggested between teacher attitude and increased receptivity on the part of students to expand occupational choice.

Ryan (1975) analyzed the basal reading and library materials in one school district in order to determine the amount of exposure given to each of six occupational areas: professional, semi-professional, skilled, semi-skilled, unskilled, and unclassifiable. The data indicated that professional and managerial jobs were depicted twice as often as clerical, sales, service, skilled and semi-skilled careers.

Women were portrayed only in stereotyped occupations such as cashier, teacher and nurse, despite the fact that the then current labor force was composed of 42% females.

In a survey of children's literature, Hillman (1976) compared sex-related occupations during two distinct eras of American history - the 1930's and the late 1960's. It was hypothesized that in the Early Period, women and men would be cast in traditional roles, while in the Recent Period, less sex-role stereotyping would be evident. The findings, however, indicated that female occupations for the two periods differ only slightly. Hillman concluded that authors are not portraying females in exciting, prestigious, well-paying jobs and that this may have a narrowing effect on children's career aspirations. Gilsdorf & Gilsdorf (1975) performed a content analysis of two career orientation textbooks in order to determine if sex stereotyping occurs. Results showed that in both cases, males were over-represented and, with few exceptions, females and males were presented in traditional occupational sex roles. They concluded that these materials fail to present reality and to prepare students for future career opportunities.

Interests

Interests play an intimate role in career development, although it is difficult to conclude their degree of impact when compared to other personal factors such as values and abilities (Osipow, 1973).. The Ginzberg (1951) study of vocational behavior observed that boys in sixth and seventh grades based their choices primarily on interest, while in grades eight and nine, the basis of choice was capacity, and in grades ten and eleven, the choices were based largely on values. A

frequently cited study by O'Hara (1962) confirmed these observations. The majority of his sample of sixth grade boys made vocational choices based on interests, while approximately one third of the boys based their decision on their values. For girls of the same age, there was evidence that values were of primary importance with interests secondary. Little attention was paid to capacity by either sex at the grade six level, and O'Hara questioned its existence at the grade eight and nine level as Ginzberg suggested. Sharf (1970) stated that male students report interest as more significant than ability in vocational decision-making. However, Isopow (1973) points out that there is a difference between occupational preference and occupational attainment and warns that these results should not be interpreted to imply that, in the long run, interests are more important than abilities in vocational behavior. Rather, interests should be interpreted as representing a current state of a person's development that are subject to change as the individual matures.

Abilities

A person's intelligence and his aptitudes play a significant part in the vocational level he is likely to attain, the likelihood of entrance entrance to and success in a training program, and the quality of work he will perform (Herr & Cramer, 1972; Shertzer & Stone, 1976). Early in the study of vocational choice, Parsons (cited by Gysbers, 1974) listed three broad factors which influence a wise vocational choice:

1. a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations and their courses.

2. a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in

difficult lines of work.

3. true reasoning on the relations of these two groups of facts.

(p. 14)

This formed the foundation of the trait-and-factor approach to vocational guidance which, in simplified form, attempted to match individuals to occupations on the basis of their personal traits.

While more recent career development theorists generally acknowledge the importance of abilities in career choice (e.g. Roe, Holland), Super (1957) contends that individuals continually assess their abilities and test them out against reality; as such, they are critical to career decision-making (Osipow, 1973). A previously cited study by O'Hara (1962) indicated that grade six children do not take ability into account when stating occupational preferences. Gribbons and Lohnes' 1966 study (cited by Bailey & Stadt, 1973) compared IQ levels with occupational preference among eighth, eleventh, and twelfth graders. They found that students in lower IQ ranges persisted in their preferences for occupations which require greater levels of educational preparation than they may realistically expect to attain. Similar results were obtained by Greason and Schilson (1970) in their sample of grade six students.

Values

Work values are the product of a person's interaction and identification with a number of socializing agents, including family, peers and teachers (Super, 1957; Herr & Cramer, 1972; Mangum et al, 1977). Most values are formed in childhood; since the majority of a child's early experiences are spent within the family environment, parents

serve as the primary and potentially most influential role models with whom children can identify (Super, 1957). Parents provide children with their first glimpse of the working world: they communicate their work values by how they perform activities at home, discussing their job experiences, and reinforcing the work habits and achievements of their children. As a result, the values which children develop are likely to reflect those of their parents. The following research supports this contention.

Perrone's (1973) longitudinal study of adolescent's occupational values found that by grade eleven, students were able to accurately perceive their parent's values and that these values corresponded with their own. However, when students were categorized according to their primary occupational value, correspondence to parental values was inconsistent. A study by Goodale and Hall (1976) indicated that female's work values are less related to parental attitudes than are those of boys. Wijtung, Arnold and Conrad (1978) conducted a cross-sectional comparison of parents and children in grades six, nine, ten and twelve in order to examine (1) if changes in work values occur, and (2) if there is a relationship between parents' work values as a function of age and sex. Results supported Peronne's (1973) findings and, further, suggested that during the early years, children tend to identify with the values of their like-sexed parent. However, by grade twelve, both sexes tended to reflect values similar to their fathers' while mothers' work values were dissimilar to either their children or their spouses.

The developmental nature of value formation is evidenced in studies of vocational values at the elementary school level. Cooker

(1973) studied the work values of children in grades four, five and six in order to determine the nature of those values as they relate to grade level and sex. He found little change in values over the middle elementary years and posited that the process of value formation may have it's beginning within or prior to the primary grades. Sex differences were evident, however, with girls placing more importance on altruism and helping others, and boys valuing such things as money and control. Similar results were found by Hales and Fenner (1973) suggesting that traditional sex role trends are reflected by the values that children hold.

Summary and Implications for Elementary School Career Awareness Programs

An examination of selected career development factors has highlighted the home environment as the major source of vocational knowledge during the early years of life (Ginzberg et al, 1951; Super, 1957; Luckey, 1974; Mangum et al, 1977). Parents are the primary role models in a child's early life and as such appear to have an influence on children's attitude and value formation (Perrone, 1973; Goodale & Hall, 1976; Wijtung et al, 1978; Mangum et al, 1977), views on sex role division in occupations (Looft, 1971; Iglitzen, 1972; Shepherd & Hess, 1975), and ultimately, career preference (Roe, 1957; Super, 1957; Werts, 1968; Creason & Schilson, 1970). The school also appears to have an impact on children's perceptions of the world of work. Teachers may consciously or unconsciously communicate biases toward certain vocations (Georgiandy, 1976) or reinforce sex role behavior (Jacobs, 1972; Hilflinger, 1978). Textbooks, including career education materials, may under-represent certain occupational groups (Ryan, 1975)

or present men and women in stereotyped work roles (Hillman, 1976; Gilsdorf & Gilsdorf, 1975). An interplay or interests and abilities plays a fundamental role in a person's eventual career choice as well (Osipow, 1973).

A basic understanding of the above outlined variables had practical implications for the development of any career awareness program. Since the home and family environment is such a key component in career development, parental participation should be solicited wherever possible (Mangum et al, 1977; Hoyt et al, 1973). Parents may be invited to the school as guest speakers, volunteer helpers or organizers of field trips; this type of involvement will help the parent to gain an understanding not only of what the school is doing, but also of the importance of his or her own role in the child's career development. Teachers, in turn, should understand the child as part of a family unit and strive to relate the importance of his role as a "worker" within the family.

Studies by Georgiandy (1976) and Jacobs (1972) underline the need for teacher workshops to provide educators with an opportunity to explore their work attitudes and values. The elementary school teacher, more so than any other educator, has the responsibility for inculcating basic values and fundamental skills (Hoyt et al, 1973); therefore, it is critical that these teachers have an awareness of their impact on a child's vocational development. Educators at all levels should have an understanding of the powerful influence of classroom reading materials and carefully screen textbooks for incidents of sex role stereotyping. Furthermore, teachers should plan activities that expose children to a variety of occupations held by both men and women.

Evidence of value formation at the elementary school level (Cooker, 1973; O'Hara, 1952; Hales & Fenner, 1973) implies that in order to assure maximal development of the valuing process in regard to careers, organized classroom units should be developed that would provide for discussion, examination, and understanding of values and their role in occupational choice. Children should also be provided with opportunities to expand their interest areas and test their abilities within the school environment. However, they should also be made aware of the changing nature of values, interests and abilities and not be led to believe that they must choose a particular career now.

Career Awareness Programs in the Elementary School

The preceding discussion on career development theory and factors affecting this process has directed its focus toward implications for the development of career awareness programs at the elementary school level. The following section outlines the goals and objectives of several existing programs and the activities and procedures involved in implementation.

Establishing the Need

Hoyt et al (1973) point out that "of those who will drop out of high school, more than half can be identified before they complete the fifth grade, i.e., they were "turned off" to the public school system long before they became high school students" (p. 13). They advocate a career education approach, instituted at all grade levels, as a major strategy in helping children to "make sense" out of school and become aware of its importance to their futures.

The influence of parental role models in shaping career development

has been thoroughly discussed (Super, 1957; Ginzberg et al, 1951; Mangum et al, 1977). Many elementary school children come from homes where unemployment has been the rule rather than the exception for one or more generations and where the future in terms of occupational choice is unspoken and, indeed, unknown. A common problem among many schools, therefore, is to convince these disadvantaged youth that staying in school will enhance their chances of future employment (Kaback, 1966; Roberts, 1972). Jefferies (1973) asserts that career development guidance provides inner-city children with a "way out" by encouraging them to raise their educational and occupational aspirations. She emphasizes the importance of bringing in role models from the inner city who are successful in the working world so that children can understand more readily the link between education and work.

Goodson (1970) postulated that providing occupational information to children at an early age should encourage them to remain in school and prevent their rejecting various occupations because of inadequate information. Elementary school children were interviewed individually in order to assess their occupational interests and perceptions. Results showed that children of all ages were able to report observations, interests and disinterests in relation to occupations, with younger children conceptualizing work more in terms of the activity (e.g. "painting the house") instead of the job title as was evidenced by older children. The researcher observed that many children revealed ignorance or misinformation about the work people perform which strengthens her claim for the presentation of accurate information at this level. Furthermore, the children's willingness to discuss their

occupational knowledge suggest that this type of subject matter would have significant personal appeal to the young learner.

Roberts (1972) surveyed elementary teachers in one school district in order to determine if vocational information was ever included in the curriculum. Results indicated that this type of information was not intentionally incorporated into the teacher's lesson plans, but that it would be if resources were available. A subsequent survey was conducted among junior high students in the same school district in order to ascertain their views toward occupational guidance. These results pointed out the lack of information about jobs at the elementary school level and revealed their receptiveness to the incorporation of occupational information into the curriculum. A similar study by Benson & Blocher (1975) confirmed these results and highlighted the desire among students for help in identifying their goals, perceptions and needs in the area of career planning.

Approaches to Career Awareness Programs

An examination of the objectives and strategies of elementary school career awareness programs in operation over the past ten years reveals two major areas of focus: (a) counseling for self-understanding and personal development, and (b) implementing a well-formulated program of broad, general occupational information that serves as the foundation of later career decisions (Bugg, 1969; Bender, 1973; Roberts, 1972; Ewens, Seals & Dobson, 1975). Both aspects of career guidance are uniquely appropriate to every level of education and to almost every school subject. Leonard and Splete (1975) describe career guidance as a "unifying thread"; rather than regard career education as a separate unit or subject, they feel that teachers should attempt to relate career

guidance activities to all curriculum subjects. They outline a variety of creative activities that can easily be integrated into the curriculum. One example involves using a game format based on a current television quiz show. Children have to guess the "guest's" occupation in twenty questions or less. This type of approach can be used in a language arts class to develop research and interviewing skills while at the same time providing students with new information about careers.

Although methods of implementation may vary according to the particular school or district involved, career awareness programs tend to maintain common objectives (Hoyt et al, 1973; Bender, 1973; Splete & Schmidt, 1975; Brown, Feit & Forestandi, 1973; McKinnon & Jones, 1975; Bailey, 1975; Mangum et al, 1977; Hansen, 1974; Gysbers, 1974). These are extensions of the two major goals outlined above, that is, to provide experiences for self-development and expansion of general occupational information. A summary of program objectives follows:

1. To provide role-models with whom the students may identify and thus more accurately perceive various occupations and the significance of each.
2. To help students develop an awareness of a wide variety of careers.
3. To help students to make the connection between school subjects and employability skills.
4. To expand students' vocational vocabulary.
5. To assist students in developing positive attitudes toward the world of work and appreciation of the dignity and worth of honest work.
6. To help students develop attitudes ot self-worth and importance as individuals.
7. To help students develop an awareness and appreciation

of basic human values.

8. To help students develop an awareness of the rights and needs of others.

9. To help students to become better acquainted with their own interests, capacities, and values, and understand their importance in choice making.

10. To help students to acquire decision-making skills.

Once goals are identified, planning and involvement by parents, teachers, counselors, and community representatives should be undertaken in order to implement a sound career awareness program (Ewens et al, 1975).

(i) Parental Participation

Involving parents in the career awareness program serves three major functions:

1. It assists in the formation of positive parental attitudes toward school.

2. It informs students about the type of work parents perform.

3. It helps parents to become more aware of the impact of their own work attitudes and values on those of their children.

This process may be facilitated through parent-teacher discussions and newsletters informing parents of upcoming activities, or through more direct means such as inviting parents to speak to the class or help organize a field trip (Hoyt et al, 1973).

(ii) Teacher Functions

Like all organizational changes, career awareness programs are subject to resistance. Changes in teaching procedure and curriculum may produce tension and anxiety in certain staff members (Benson & Blocher, 1975). As a result, teachers need to be oriented to the career development concept through an organized staff development

program (Hansen, 1974). Since the teacher will ultimately be responsible for communicating career principles to the students, an examination of his/her own values concerning the world of work should be undertaken so that unconscious biases are not imposed on the students (Jacobs, 1972; Ewens et al, 1975; Georgiandy, 1976).

(iii) The Counselor's Role

Brown, Feit and Forestandi (1973) view the counselor's role in terms of the "3 C's" model: counseling, consultation and coordination. Within the framework of this model, the counselor's initial involvement in terms of career awareness would be as a coordinator. The counselor may serve as the liaison between teachers, parents and the community, and would be responsible for setting up in-service training for staff members (Kehas, 1973). Bottoms and Sharpe (1973) view the counselor as functioning as a career team leader. Hansen and Tennyson (1975) conclude that career education provides the counselor with the opportunity to become directly involved as a resource person for helping identify program goals, strategies and media as well as a participant in team teaching and systems change.

(iv) Community Involvement

"A potentially effective program provides for community orientation to and involvement in the career development program" (Hansen, 1974, p. 22). Two major strategies for involving community members in career awareness programs are immediately evident. The first involves inviting representatives from business and industry into the schools to talk about their careers and leisure time activities. A second strategy would be to take children on field trips to industrial settings for observation of real work activities. Following these

visits, teachers could involve students in discussions, role plays or research projects that could be integrated into other subject areas. Hoyt (1976) calls for active work experience programs available for use, in varying ways, in the total learning process, beginning at the elementary school level. Such an approach would enable children to actually "try on" a work role for a day thereby facilitating greater self-awareness of their own abilities and interests.

Program Outcomes

The impact of the career education concept is most keenly felt when the outcomes of various programs and activities are discussed. Selected examples of career awareness projects are discussed below to clarify this contention.

Omvig and Tulloch (1977) studied the relationship between career education and career maturity using Crites (1973) Career Maturity Inventory. Using a pre- post-test design, half the grade six and eight students in a Kentucky school district participated in a full term career education program while the other half served as controls. Post-test data indicated that career education did have a positive effect on career maturity levels of students participating in the program.

In an attempt to minimize occupational stereotypes among sixth graders, Vincenzi (1977) developed a ten week career awareness program which included discussion of stereotyping, film presentations, and in-class visits by women in traditionally male occupations. Results indicated that the number of occupational sex stereotypes children have can be minimized, particularly through discussions with non-traditional role models. The use of role models to expand career

awareness is also supported by Bank (1969) who invited parents and community members to participate in a Career Day at a Detroit school. Written and pictorial evaluations by students indicated that their understanding of the world of work and workers was enhanced by observing the role models' presentations.

In order to determine whether elementary school children could realistically gain occupational awareness important to vocational attitude and value formation, Wellington and Olechowski (1966) exposed children to a unit of study called "Shelter" which dealt with the building industry and the workers involved. Children were asked to interview parents and people that they knew in order to learn more about the many occupations that exist. Observational data indicated that children could: develop a respect for other people, the work they do and the contributions they make; understand that occupations have advantages and disadvantages for the worker; understand some of the interdependent relationships of workers. Similar program approaches have been discussed by Splete & Schmidt (1976) and Leonard & Splete (1975) with results generally highlighting student enthusiasm and teacher satisfaction that children are benefitting from the experience in a positive manner.

Summary

The incorporation of career education programs into the school system may help children "turn on" to school by helping them to see more clearly the link between education and employability (Hoyt et al, 1973; Kaback, 1966; Jefferies, 1973). Surveys and interviews with both teachers and students indicates their receptiveness to such a program, provided adequate resources are made available (Goodson, 1970;

Roberts, 1972; Benson & Blocher, 1975).

Program objectives have generally reflected two major goals of career awareness: (1) counseling for self-understanding and personal development, and (2) implementing a broad occupational information base to be used in later career decisions (Bugg, 1969; Roberts, 1972; Bender, 1973; Ewens et al, 1975). The implementation of objectives into a workable career awareness program should include the participation of parents, community resource people, teachers, and counselors. The counselor can serve as the liaison between home, school and community, and initially could be the major resource person. However, through in-service programs, staff should be encouraged to develop their own ideas for program implementation.

A review of selected programs and activities generally highlights the positive outcomes of career education. Children appear to make gains in occupational awareness in terms of vocational attitudes and value formation (Wellington & Olechowski, 1966; Vincenzi, 1977) as well as in career maturity (Omvig & Tulloch, 1977). Moreover, teachers report that children are enthused about learning careers and that the experience enhances their total educational experience (Splete & Schmidt, 1976; Leonard & Splete, 1975).

CHAPTER III

METHODOLOGY

In Chapter III, the development, implementation, and evaluation strategies for the treatment programs adopted in the present study are discussed. A four stage model of program planning and evaluation developed by Jones, Dayton, and Gelatt (1977) provides the basic outline for discussion. A brief description of these four phases follows:

1. Program Planning: defining a philosophy and basic assumptions, assessing desired outcomes, and establishing program goals.

2. Program Development: defining program objectives in behavioral terms, identifying and putting together the best ways to accomplish what is desired.

3. Program Implementation: identifying the sample, acquainting staff with the rationale and procedures, putting the program into action.

4. Program Evaluation: systematic gathering of information for the purpose of program improvement, including a description of research design and instrumentation.

(Jones, Dayton and Gellatt, 1977, pp. 24-27)

Program Planning

The information presented in Chapter I outlined the rationale for the development of a career awareness program at the elementary school level. Emphasis was placed on the developmental nature of career choice and the importance of career education as a means of facilitating this process. An indepth survey of selected career development theories and factors as well as a review of career education strategies and programs has led this author to make the

following assumptions in the process of program planning:

1. Career development is a life long process, paralleling human development.

2. Work values and attitudes are developed to a significant degree during the pre-school and elementary school years.

3. Elementary school teachers, more so than educators at any other level of schooling, are responsible for inculcating basic values and fundamental skills.

4. Career education facilitates career development by helping individuals to (a) have reasons to want to work, (b) acquire the skills required for useful work, (c) know how to obtain work opportunities, and (d) enter the world of work as successful and productive contributors.

5. Career awareness is the first stage of the career education process, and generally corresponds to the elementary school years.

Career awareness, a component integrated within a total developmental guidance program, strives to provide children with experiences leading to greater self-understanding and increased knowledge of occupational roles and the values of a work-oriented society (Bugg, 1969; Herr and Cramer, 1972; Stephenson, 1973; Wernick, 1973). Within this general framework, the author established five broad program goals based on a review of previously developed programs as outlined in Chapter II. The goals are as follows:

1. To help children develop greater self-awareness by exploring the following areas:

(a) identification of talents

(b) understanding of aptitudes, interests and abilities

(c) value identification

(d) goal planning

(e) decision-making

2. To develop an increased awareness of the many occupations that exist.

3. To help children to see the connection between school and the working world.

4. To develop a greater appreciation for all kinds of work, i.e. for the contributions of all working people.

5. To develop awareness of sexual stereotyping in the work force and to promote more liberal ("androgynous") attitudes toward sex roles in the working world.

Assessment of these desired outcomes will be accomplished through the development of specific behavioral objectives corresponding to individual lesson plans, and through administration of questionnaires and test instruments. These will be discussed later in the chapter.

Program Development

Program development was a two phase process. First, having outlined the major goals of the program, general ideas for lesson plans were gathered from previously developed programs (e.g. Leonard & Splete, 1975; Leonard, 1973, 1974; Laramore & Thompson, 1970) as well as from local educators and career consultants. In the second phase, specific procedures for each lesson were devised and behavioral objectives were outlined. Twelve half-hour lessons were prepared in total (Appendix A); one lesson entitled "Guest Speaker" could be used on numerous occasions throughout the course of the program.

"Bread and Butterflies - A Curriculum Guide in Career Development",

developed by the Agency for Instructional Television (1974) was employed as the second treatment program in this study. A complete description of program goals and lesson plans can be found in Appendix B. The program consists of fifteen 15 minute videotape presentations, thirteen of which were available at the time of program implementation. The basic presentation format involved the videotaped lesson, followed by discussion of key questions outlined in the curriculum guide. During the sessions where videotapes were not available, the students were involved in role-play activities and in planning a classroom project aimed at applying the concepts discussed in the films.

Program Implementation

The Sample - The sample consisted of sixty-four grade six children from a local public elementary school (33 females, 31 males). The majority of students attending this school were from families of average socio-economic class. The mean age for the total group was eleven years.

Arrangements to implement the program were initially made through the school counsellor. The grade six students were chosen because (a) several teachers at this grade level had already expressed interest in career education, and (b) it was felt that this type of program would be of benefit to the students when planning their Junior High options the following year.

Procedure - A preliminary meeting was set up between the school counsellor, the grade six teachers, and the author at which time an introduction to career development and career education was provided. The goals and objectives of the career awareness program were also discussed and an introductory videotape entitled "About Bread and

Butterflies" was shown.

All three grade six teachers agreed to participate in the study. The decision as to which classrooms would participate in the two treatment programs and which would be the control was made randomly by the author. In terms of the time factor, all of the teachers agreed to two half hour sessions per week for an eight week period (April 3 to May 26, 1979). They suggested that both treatment programs be run during the first period in the afternoon in order to best accommodate their schedules.

Group Leaders - Since both programs were to be run simultaneously, two group leaders were necessary. The career awareness program developed by the author was run by a certified teacher who had also completed a graduate counselling practicum, specializing in elementary school counselling. It was felt that experimenter bias would best be eliminated by having another person lead this group. The author led the "Bread and Butterflies" program. This program followed a more structured format consisting of video-tape presentations and organized group discussion. Thus, the leader's contact with the group was much more limited, curbing the impact of experimenter bias to a greater extent.

Program Evaluation

The evaluation procedures adopted in this study were designed to gather information for the purpose of program improvement. This function is called formative evaluation and, as the name implies, describes the evaluation of educational programs that are still under development.

The major objectives of the formative evaluation conducted in this study are outlined as follows:

Objective #1 - To determine student reactions to the programs in terms of interest level, enjoyment and suggestions for program improvement.

Objective #2 - To determine teachers' and group leaders' reactions to the programs in terms of suitability of program content, feasibility of program adaptation, and suggestions for program improvement.

Objective #3 - To determine feasibility of program goals in terms of:

(a) students' ability to meet behavioral objectives

(b) students' ability to perceive work roles in more liberal terms

(c) students' ability to express knowledge of a greater number of occupations

(d) students' ability to discuss their future plans, express their present abilities and interests, and identify occupational concepts.

Objective #4 - To determine the suitability of the standardized measure used in this study.

Research Design - The pre- post-test design with control and experimental groups was utilized to insure that changes in behavior would be more directly attributable to the experimental treatment. Each classroom was randomly assigned to a group. All students were then tested one week prior to the introduction of the program. Class A received the Career Awareness Program developed by the author; Class B received the "Bread and Butterflies" series; Class C served as the control group and remained with their regular teacher. One week after the completion of the programs, all three classes were re-tested. The

experimental groups also answred a subjective evaluation of the program. It was felt that this ten week period between testing would be sufficient to eliminate carry-over effects. Students were also encouraged to respond as they felt now, rather than attempting to recall previous answers.

Some difficulties arose relative to the subject sample. During the pre-test phase, four students were unavailable for testing due to their participation in an extracurricular program. Three of these students were in the control group (Class C) and one was in Class B. Over the ten week period, two students from the control group moved away, while one student from each of the treatment groups left. Thus, these students were not available for post-testing and their pre-test results were not taken into account during data analysis. The final group composition was as follows:

Class A	Career Awareness Program	n=23
Class B	Bread and Butterflies Series	n=23
Class C	Control Group	n=18
		Total N=64

Instrumentation

Student Evaluations - An evaluation form was devised for each experimental group in order to determine if, overall, the students found the programs to be enjoyable and meaningful enough to incorporate into the regular school curriculum (Appendix C). Class B was asked to state what they had learned from the "Bread and Butterflies" series, while Class A was asked to write down what aspects of the career development program they liked best, and what parts, if any, they did not like. Both groups were asked to make suggestions for program improvement.

Teacher Evaluations - During the eight weeks that the programs were in progress, both experimental group classroom teachers agreed to observe the process. Upon completion of the program, each teacher submitted an evaluation based on his/her perceptions of the students' overall interest level, the suitability of the program in terms of content, and the feasibility of integrating the program into the curriculum. They were also asked to comment on how they felt the program could be improved to make it more interesting for grade six students.

Group Leader Evaluations

Career Awareness Program (Class A) - At the end of each lesson, the group leader recorded her perceptions of the students' interest level and whether or not the behavioral objectives of the lesson had been met based on classroom participation. An evaluation of the lesson plan based on clarity of instructions, suitability of content, and consideration of time limits was also included.

"Bread and Butterflies" Program (Class B) - At the end of each video-tape presentation, the group leader recorded her perceptions of the students' interest level based on classroom participation during group discussion, and general observations during the film. In addition, student feedback was solicited through informal ratings of each film. The average class rating, based on a scale of 1 to 5, was obtained by a vote at the end of each lesson.

Questionnaire Data - A self-devised questionnaire was administered to each student prior to and following program implementation in order to ascertain students' ability to discuss their future plans, express their present abilities and interests, and identify occupational concepts.

The questionnaire was divided into three sections. Part I asked the children to identify the type of work that their parents do, and to discuss their future plans in terms of the kind of work they want to do when they finish school, the amount of education needed for this job, and the type of work they would not like to do. Part II consisted of a series of true/false statements containing key occupational concepts; the children were asked to circle "T" or "F" depending on their understanding of the concept described. The final section of the questionnaire asked students to describe some of the activities that they like to do both at school and at home (Appendix D).

Sex Role Attitude Test - One aspect of the formative evaluation was to determine whether children exposed to the career awareness programs would demonstrate more liberal or "androgynous" attitudes toward sex roles in the working world. To substantiate this objective, a sex role attitude test adapted by Jack and Fitzsimmons (1978) from one described by Shepherd and Hess (1975) was administered (Appendix E). Students were presented with a list of 35 occupations and activities which they ranked as "woman", "man", or "either" in response to the question "Who should do this job?" A liberality score was determined by calculating the total number of "either" responses. An individual's score could thus theoretically range from 0 (non-liberal) to 35 (total liberality).

This type of attitude test was initially developed by Iglitzen (1972) in her study with fifth graders. Shepherd and Hess (1975) expanded upon the technique in a later study. They defined "traditionality" in terms of the judgments of 50 female and 50 male college students enrolled in introductory psychology courses. The students

were presented with a list of 44 adult occupations and activities and asked to indicate for each one whether, according to the traditional American viewpoint, it should properly be performed by a man, a woman, or either one. It was emphasized that judges were not to respond with personal attitudes, but merely with their understanding of the traditional attitude. This resulted in a list of 43 items on which at least 60% of both male and female judges agreed as to the traditional sex role designation. On 28 of the items there was at least 90% agreement among judges of both sexes. Shepherd and Hess presented this list to four age groups in order to determine how much these attitudes deviated from the traditional American viewpoint. The basic response measure, "liberality", was defined in terms of the number of items on which each subject deviated from traditionality.

For the purposes of this study, liberality scores were compiled for students in all three classrooms on both pre-test and post-test administrations. T-tests were used to assess the significance of mean pre- and post-scores within groups. In addition, mean liberality scores for each sex were calculated and analyzed with the T-test procedure. A two-way analysis of covariance (treatment versus sex) determined the significance of differences between the two treatment conditions and the control group, as well as between the sexes. Differences beyond the .05 level were treated as significant.

Career Maturity Inventory-Competence Test: Subtest II - "Knowing About Occupations"

A major goal of career education programs at the elementary level is to provide a broad base of occupational information from which students can become better acquainted with the magnitude of jobs that

exist (Bugg, 1969; Ewens et al, 1975). "Knowing About Occupations", Part II of the Career Maturity Inventory Competence Test, was constructed to meet the need for a standardized measure of occupational information. As such it provides a means of assessing the impact of career education programs on students' knowledge of the world of work (Crites, 1974). The subtest consists of 20 descriptions of what workers do; the task is to answer the question "What is his occupation?" from the five alternatives provided.

Several criteria were considered for deriving item content for this subtest. First, a two-way occupational scheme based on Roe's (1956) Field and Level classification was developed as a conceptual frame of reference. Second, only items that comprised 75% of the labor force (1970 U.S. Census) were included. Third, most of the occupations were give rapid growth projections by the U.S. Department of Labor predictions. Finally, most of the occupations are found in the Strong Vocational Interest Blank and the Kuder Occupational Interest Survey (Form DD) for both men and women.

Standardization of the Occupational Information Subtest as part of the Competence Test of the Career Maturity Inventory (CMI) was performed using over 2000 students (grades 6 to 12) in a middle class suburban California school district. The criterion for item selection was whether the mean item responses across grades described a monotonic function. The initial item pool of 30 questions per subtest was narrowed down to 20 items, resulting in a suggested working time of 30 minutes per subtest. Items were written for a sixth grade reading level using the Dale-Chall formula.

Only internal consistency coefficients are available for the

subtests of the CMI Competence Test. The Kuder-Richardson Formula 20 was calculated for each grade level in the standardization sample. The internal consistency coefficients for the Occupational Information subtest ranged from .81 at the grade six level to .88 at the grade 12 level. This indicates that all items are relatively homogeneous and can be assumed to be measuring essentially the same variable (Crites, 1973).

Three types of validity have been established for the Competence Test of the CMI. In terms of content validity, the subtests were designed to qualify aspects of career development and the content of the items was derived from real-life situations providing theoretical meaningfulness. Crites (1974) points out that "the interest and involvement of students in the standardization and 'try out' testing with the Competence Test have indicated they find the item content meaningful and relevant to their career decision making" (p. 36. Evidence of criterion-related validity rests upon the monotonical relation of items to grade indicating that the developmental variable, career maturity, bears a systematic relationship to time. In addition, findings from an analysis of the percentage overlap in score distributions between adjacent grades indicate that the differentiation is fairly sharp: the median percentage overlap was 43%, with a range from 33% to 56% (Crites, 1974). Construct validity has been tested using product moment correlations among the subtests. The r's range from .25 to .73 with a mean of .54, which is the approximate theoretical expectation (Crites, 1973).

For the purposes of this study, the Occupational Information Subtest was to be used initially to measure students' understanding of

jobs prior to and following program implementation. However, although this instrument has been standardized on a grade six sample, a review of the literature failed to reveal an adequate research base at the elementary school level. In fact, the majority of evaluations performed on elementary school career education programs have relied on self-devised instruments and have pointed out the need for a standardized career awareness measure designed especially for the elementary school population (Vincenzi, 1977; Newell, 1976; Benson & Blocher, 1975; McKinnon & Jones, 1975; Fadale, 1975). Consequently, the Occupational Information Subtest of the CMI Competence Test was included in order to determine its suitability as a measure of career knowledge at the grade six level.

Since this study relied on the use of intact classrooms for its sample, the analysis of covariance was the procedure used to determine the significance of differences between groups on the post-test score means of the Occupational Information Subtest (Borg & Gall, 1979; Ferguson, 1976). In addition, the T-test procedure for correlated means (Ferguson, 1976) was applied to assess the significance of mean pre- and post-test score differences within groups.

CHAPTER IV

RESULTS

In Chapter IV, the results of the subjective evaluations will be presented first. Questionnaire results will then be described, followed by analysis of test data. Henceforth, where applicable, the Career Awareness Program will be referred to as Treatment 1, while Treatment 2 will be used to denote the "Bread and Butterflies" series.

Student Evaluations

Table 1

Student Evaluation of the Career Awareness Program
(n=23)

	Yes	No	Undecided
Enjoyed the program	21	2	0
Would like to see it become part of the regular school program	16	6	1

From Table 1, it appears that the majority of students (21/23) enjoyed the program. A summary of their comments appears in Appendix F. These responses generally indicated that they found the program interesting, fun, and helpful in learning about how to prepare for the future. One student stated, "I think it will help us realize what a real job is all about. We get an idea of how hard the job is and how much responsibility there is in having a job." Table 1 also indicated that 16 out of 23 students would like to see the program incorporated

into the regular school curriculum. Those who were opposed cited "too much work already" and "more homework" as their major reasons for not wanting the program. When asked to rate their favorite parts of the program, half the students reported enjoying the guest speakers the most; the lessons on planning a class enterprise received the second greatest number of votes. In response to the question "What parts of the program did you not like", thirteen students stated that they liked all of the program. The first and second lessons (Introduction and 'About Me') were the only ones receiving negative feedback. One student felt that the entire program was boring. In terms of program improvement, the students identified the need for more guest speakers, more opportunities for role play, and a longer time period.

Table 2

Student Evaluation of the "Bread & Butterflies" Series
(n=23)

	Yes	No	Undecided
Enjoyed the program	20	1	2
Would like to see it become part of the regular school program	20	3	0

Table 2 indicates that 20 of 23 participants enjoyed the program and were in favor of it's incorporation into the curriculum. From their comments (Appendix F), it appears that they found the film series interesting, humorous, and that it gave them ideas about their futures. The students that did not enjoy the program felt that some films were "stupid" and that it interfered with school work. The students were

able to cite a number of positive learning experiences as a result of the program including the need for cooperation, responsibility, trust, respect for what people do, and an understanding of how people feel when they do something that they enjoy. When asked to suggest ways in which the program could be improved, seven students were satisfied with the present program. A need for more time, more activities relating to the films, and more interesting content were the major suggestions.

Teacher Evaluations

Both teachers expressed positive reactions to the programs. The teacher who observed the Career Awareness Program rated the overall interest level as very high, the content as most appropriate, and stated that there is a "definite need for this kind of program at the grade six level". He recommended that the program be extended over a greater period of time and be dealt with in greater depth; he also expressed his desire to continue the program in the following year.

The other teacher felt that the "Bread & Butterflies" series was well done from the viewpoint of script, acting and making the point. She commented that the contemporary mood of the music and language appealed to the children's interest level, but cautioned that this could be a danger in later years since these two factors are so transitory for the young. She felt that there was a place for the series in the curriculum, but that it should be incorporated into other subject areas and classroom activities. In terms of improvements, she included a detailed description of how concrete practice situations should be set up in the classroom: "The relationship between problem-solving interactions in the classroom to the problem-solving

requirements of the vocational world could be constantly stressed." The teacher concluded her evaluation by pointing out factors which may have had a bearing on the success of the program. These included the small room in which the films were shown, the heavy activity schedule at that time of the year, and the lack of a feeling of cohesiveness among the classroom as a whole. (See Appendix G for complete teacher evaluations).

Group Leader Evaluations

Career Awareness Program - The following table summarizes the group leader's evaluation of the program. Lessons fall into one of five ratings: excellent, very good, good, fair and poor. Refer to Appendix A for a description of the lessons and behavioral objectives.

Table 3

Group Leader Evaluation of Lesson Plans Career Awareness Program

Lesson	Rating	Behavioral Objectives Met
1	Excellent	Yes
2	Poor	No
3	Good	Yes
4	Excellent	Yes
5	Good	Yes
6	Excellent	Yes
7	Fair	Partially
8	Excellent	Yes
9	Excellent	Yes
10	Good	Yes
11	Good	Yes
12	Excellent	Yes
13	Excellent	Yes
14	Excellent	Yes
15	Very Good	Yes
16	Very Good	Yes

With the exception of two lessons, the behavioral objectives set out for each lesson plan were met. The criterion for success was based on the group leader's observations of student participation; as a further check, students were given work books for recording information (eg. listing their interests). These were collected periodically by the group leader. Full class participation was observed in 14 out of 16 lessons and student interest level was perceived as very high overall. Only one lesson, dealing with interests, abilities and values, was viewed as disorganized and confused. Suggestions for reorganization were furnished by the group leader. A second lesson, dealing with occupational stereotyping, involved a film strip presented from a feminists' perspective. The group leader commented that "the film would have been more appropriate if it had presented the changing role of both men and women in our society...thereby dealing more effectively with the term 'stereotyping'". Refer to Appendix H for the complete evaluation of the lesson plans.

Bread & Butterflies Program - The following observations summarize the author's evaluation of the "Bread & Butterflies" program:

1. Overall, student interest level appeared to be high. During the majority of videotape presentations, the noise level was minimal and students generally responded well to humor in the films.

2. The majority of students participated in organized class discussions following the films. Most students were able to successfully focus on key issues in the plot and relate these to their own lives.

3. The majority of students expressed a desire to practice many of the concepts discussed in class. For example, following a lesson

on earning money, three children started their own lawn-mowing service.

4. The students tended to be most responsive to films that had a definite story line as opposed to those taking more of a documentary approach. They also appeared to enjoy action scenes (eg. parachuting, scuba diving, and racing) and music.

5. The curriculum guide was well-organized. Each lesson included a summary of the program, a lesson goal and objectives, and a list of key discussion questions. The discussion questions began with a review of the major points in the film; the focus then moved gradually to the student and his/her awareness of how the particular concept related to self.

6. Results of students' ratings of the individual videotape presentations are summarized in Appendix H. These ratings, ranging from 1 (poor) to 5 (excellent), were obtained at the end of each class following a vote by the students. Overall, they tended to rate the films as average (3) to very good (4).

7. The students particularly enjoyed having opportunities to try out various ideas suggested in the videotapes. On those occasions where tapes were not available, the students were given a chance to plan their own class activity. Through these exercises, they were able to see the value of team cooperation and the need for group organization. They were successfully able to divide themselves into committees and appoint group leaders to represent them.

Questionnaire Data

Responses to Part 1 - "About my Future Plans" - On both pre- and post-test administrations, 95% of the total sample were able to describe the type of work that their fathers did while 93% could describe their

mothers' jobs. This indicates that children are aware of parental work roles.

In response to the question, "What kind of work do you want to do when you finish school?", the majority of students (95%) indicated specific career plans, while only 5% replied that they did not know. These figures remained constant on the post-test. A total of 34% of the subjects changed their career aspirations on the post-test measure (16% from Treatment 1; 12% from Treatment 2; 6% from the control).

As a group, the students listed a total of 41 different occupations. The variety of career choices was evenly distributed between males and females with the former listing 23 career choices and the latter 24. Similarities in career aspiration between the sexes were observed for six occupations: teacher, lawyer, doctor, singer, police officer, and architect.

The most popular career choices among females were almost all associated with the helping professions: teacher (24%), lawyer (15%), doctor (15%), veterinarian (12%), and nurse (12%). Males, on the other hand, tended to prefer more varied types of careers. Their top choices were professional athlete (36%), lawyer (16%), truck driver (16%), policeman (13%), and carpenter (13%).

The students supported their career "choices" with a variety of rationales. These included a liking for a particular aspect of the occupation (eg. veterinarian - likes animals), money, excitement, fame, ability to do it well, travel, desire to help people, and the opportunity to meet new people.

Responses to the question "How much education do you need to do this?" were classified as either non-specific ("don't know", "lots",

"not much") or specific (eg. university or exact number of years required). In order to determine if shifts in the number of non-specific to specific responses occurred, the following information was compared. (See Table 4 on page 53).

Inspection of Table 4 indicated that shifts in the proportion of non-specific to specific responses between pre- and post-testing was significant for students participating in Treatment Program 1 ($z=2.65$, $p<.01$) and Treatment 2 ($z=2.0$, $p<.05$). No noticeable differences between the pre- and post-test responses to this question were observed for the control group, however. Since educational requirements for various occupations were discussed over the course of both treatment programs, it may be inferred that this involvement stimulated greater awareness of specific qualifications. The control group, which presumably did not receive any exposure to career information, would not be expected to demonstrate a significant gain in the proportion of students making specific responses to the question of educational requirements.

The students specified a total of 26 occupations which they would not like to do. This suggests that disqualification of alternatives begins at a relatively early age. The most unpopular career choices and accompanying rationales were as follows:

1. Teacher (20%) - It's hard to teach children (6)*
   I don't like children (2)
   Not enough jobs (1)
   Kids are too noisy (4)

2. Garbageman (14%) - Messy, smelly (4)
   Boring (2)
   Poor pay (1)
   I would be ashamed (1)

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*The number in parentheses indicates the number of students making that response.

Table 4

Shifts in Responses to the Question
"How Much Education is Needed for this Job"

Treatment 1 (n=21)

		Post-Test	
		Non-Specific	Specific
Pre-Test	Specific	0	5
	Non-Specific	9	7

$Z=2.65$, $p < .01$

Treatment 2 (n=22)

		Post-Test	
		Non-Specific	Specific
Pre-Test	Specific	0	7
	Non-Specific	11	4

$Z=2.0$, $p < .05$

Control Group (n=18)

		Post-Test	
		Non-Specific	Specific
Pre-Test	Specific	0	4
	Non-Specific	13	1

$Z=1.0$

3. Doctor (14%) - Messy (4)
I might faint (2)
I wouldn't want to see people die (2)
Too much responsibility (1)

4. Janitor (10%) - Dirty (3)
Boring (1)
Hard work (1)
Poor pay (1)

Least preferred occupations which were unique to female subjects included nurse (12%), secretary (9%), and housewife (6%), while for males lawyer (13%), gas station attendent (7%), and ditch digger (7%) were unpopular choices.

Responses to Part II (Occupational Concepts) - Part II of the questionnaire consisted to ten true/false statements designed to test the students' understanding of the occupational concept contained within each. Pre- and post-test results were first analyzed using the t-test technique in order to determine if within groups mean differences existed. This analysis is presented in Table 5.

Table 5

T-test of Questionnaire (Occupational Concepts) Scores
Pre- and Post- Within Groups

Source	df	Pre-Test Mean	Post-Test Mean	t
Treatment 1	22	6.95	7.95	3.08*
Treatment 2	22	6.65	7.48	2.86*
Control	17	7.16	6.83	.85

*$p < .01$

Table 5 indicates that significant differences between pre- and post-test mean scores existed for students in Treatment Group 1 ($t=3.08$, $p<.01$) and Treatment Group 2 ($t=2.86$, $p<.01$). Students in the control group, however did not evidence any significant mean differences on the pre-post measures.

An analysis of covariance, with pre-test scores being used as the covariate, was performed in order to determine if between groups differences occurred subsequent to implementation of the treatment programs. These results are outlined in Table 6.

Table 6

Analysis of Covariance of Occupational Concepts Scores

Source	df	M.S.	F-Ratio	Probability
Effects	2	7.78	4.08	0.0217*
Errors	60	1.96		

*$p<.05$

Table 6 suggests that a significant treatment effect occurred ($F=4.08$, $p<.05$). A comparison of mean differences across the three groups, using the Scheffé technique, indicated that Treatment 1 was significantly more effective in bringing about change in knowledge of occupational concepts than the control group (G1-G3, $F=3.94$, $p<.05$), but that it was not significantly more effective than Treatment 2 (G1-G2, $F=.033$, $p>.05$). No significant differences were found in the mean differences between the post-test scores of Treatment 2 and the

control group (G2-G3, F=2.03, $p > .05$).

Responses to Part III (Activities and Hobbies) - Examination of the responses of the Questionnaire - Part III indicated that the majority of the total sample (97%) were able to describe their favorite school activities and hobbies on the pre-test measure. For 67% of the sample, these responses remained stable on the post-test measure. Changes in responses tended to reflect recent changes in the season in terms of outdoor activity (eg. shift from hockey to baseball as a favorite home activity) and new developments within the classroom (eg. playing chess, an activity recently introduced by one teacher). The most popular response to the question "What I've done that I feel especially proud of" was "get good marks in school" (40%); this suggests that school achievement was highly rewarded by this sample of grade six students. In response to a question dealing with future plans, 70% indicated that they would like to hold a particular profession, 11% replied "don't know", 13% wanted to travel, and 6% (3 girls and 1 boy) stated that they wanted to get married.

Sex Role Attitude Test

The results of the Sex Role Attitude Test were first analyzed using t-tests in order to determine if significant mean differences within groups occurred on the pre- to post-test administrations. The results are summarized in Tables 7 and 8.

Inspection of Table 7 found a significant difference between the pre- and post-test score means on the Sex Role Attitude Test for Treatment 2 ($t=3.94$, $p < .01$). Although significant differences were not found between pre- and post-test score means for the subjects in

Treatment 1, nor for the control group, the students in Treatment 2 evidenced significantly higher "liberality" scores subsequent to participating in the treatment program.

Table 7

T-test of Sex Role Attitude Test Scores
Pre- and Post-Test Within Groups

Source		Pre-Test Mean	Post-Test Mean	t
Treatment 1	22	15.52	17.74	-1.69
Treatment 2	22	17.44	21.52	-2.91*
Control	17	15.94	16.72	.89

*$p < .01$

Table 8

T-test of Sex Role Attitude Test Scores
Pre- and Post-Test Scores for Each Sex

Source	df	Pre-Test Mean	Post-Test Mean	t
Females	32	18.55	22.69	3.94*
Males	30	13.97	14.68	.72

*$p < .001$

Analysis of pre- and post-test mean differences for each sex (Table 8) indicated that females demonstrated significant increases in liberality scores over the ten week period between test administrations ($t=3.94$, $p < .001$). Males, on the other hand, did not show any significant gains in liberality scores ($t=.724$, $p > .05$).

In order to determine if significant differences occurred between groups, a two-way analysis of covariance (Treatment X Sex) was performed with the pre-test serving as the covariate. The results are summarized below:

Table 9

Analysis of Covariance of Effects of Treatment and Sex on Sex-Role Attitude Test

Source	df	M.S.	F-Ratio	Probability
Treatment (A)	2	44.02	1.42	.249
Sex (B)	1	238.96	7.73	.007*
A x B	2	1.67	.054	.958
Errors	57	30.90		

*$p < .01$

No significant differences were found between the post-test means of the treatment groups and the control group. However, a significant main effect for sex was observed indicating that significant differences existed between males and females on the post-test scores. ($F=7.73$, $p < .01$). An interaction effect between sex and treatment was not significant.

Occupational Information Subtest - Career Maturity Inventory (CMI)

Results of the Occupational Information Subtest of the CMI were analyzed using the t-test procedure to determine if within group mean differences on pre- and post-test measures exist, and by the analysis of covariance technique (covarying over the pre-test means) for determining the existence of between groups differences. Tables 10 and

11 summarize the results of these analyses.

Table 10

T-test of Occupational Information Scores
Pre- and Post-Test Within Groups

Source	df	Pre-Test Mean	Post-Test Mean	t
Treatment 1	22	12.17	12.65	.81
Treatment 2	22	11.82	12.08	.37
Control	17	11.77	12.33	.70

Table 11

Analysis of Covariance of
Occupational Information Subtest Scores

Source	df	M.S.	F-Ratio	Probability
Effects	2	.93	0.111	0.89501
Errors	60	8.34		

Inspection of Table 10 revealed that there were no significant differences between the pre- and post-test means of the experimental and control groups on the Occupational Information Subtest of the CMI. Similarly, results of the analysis of covariance indicated that there were no significant differences in post-test score means between the treatment groups and the control on this measure.

CHAPTER V

SUMMARY, DISCUSSION, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary

As the bond between education and work tightens, the need for school curricula designed to prepare students for the working world becomes increasingly more apparent. Career education is one approach which holds promise for preparing students for living and making a living. It strives to help individuals make satisfying career choices based on an awareness of their own unique characteristics, an understanding of the occupational alternatives that exist, and a knowledge of the steps involved in planning and implementing career goals.

Basic to the concept of career education is the process of career development; this refers to the dynamics of change within the individual as he makes decisions about himself as a prospective, and actual member of the work force. The total pattern of career development occurs throughout one's lifetime. Career education is a vehicle which facilitates this process and, as such, should extend beyond the formal school years in the direction of both pre-school and retirement.

Within the K-12 school system, the elementary school has been most obviously exempt from exposure to career programs. The error in this practice is highlighted by an examination of the major factors affecting career development. Research indicates that work values and attitudes are developed to a significant degree during the pre-school and elementary years. The home environment serves as the major source of vocational knowledge during the early years of life. Later, as the child enters school, the elementary teacher begins to have an influence

on the child's perceptions of the world of work. A career education approach allows for a union of the home and school, as well as the community at large. It stresses the important influence of all three factors in the child's total development and provides a means by which home, school, and the community can work toward this common goal.

The purpose of the present study was to introduce a career awareness program into a local elementary school in order to evaluate student interest, teacher receptiveness, and the feasibility of program goals. Two programs were implemented for an eight week period. The first was developed by the author, while the second, "Bread and Butterflies", consisted of a series of videotaped presentations developed by the Agency for Instructional Television (1974).

Both subjective and objective data were compiled for evaluation purposes. Specific measures included student, teacher, and group leader evaluation forms; a self-devised questionnaire consisting of 3 parts: Future Plans, Occupational Concepts (T/F), and Interests & Abilities; a Sex Role Attitude Test; and the Occupational Information subtest of the Career Maturity Inventory. The latter three instruments were administered prior to and immediately following program implementation.

Results of student, teacher, and group leader evaluations submitted subsequent to program implementation suggested that, overall, student interest level was high throughout the eight week program. Both students and teachers felt that the programs had provided positive learning experiences and were in favor of incorporating career awareness into the regular school curriculum. The group leaders felt that the majority of lessons were well organized and stimulating in terms of

promoting group discussion.

The questionnaire data designed to ascertain information related to students' futureplans revealed that 95% of the total sample had definite career aspirations which they were able to rationalize. The students also described careers which they would not like to do; this suggests that disqualification of alternatives begins at an early age. Part II of the questionnaire attempted to measure students' knowledge of occupational concepts by asking them to answer "True/False" to ten statements describing key terms. T-tests comparing mean differences between pre- and post-measures indicated that the two treatment groups' scores changed significantly ($p < .01$), whereas the scores for the control group did not. An analysis of covariance of post-test means indicated that a significant treatment effect had occurred. A Scheffe Multiple Comparison of Means was employed to assess specific differences across groups. Treatment 1 was significantly more effective in bringing about change in knowledge of occupational concepts than the control group ($p < .05$). No significant differences were found in the mean differences between post-test scores of Treatment 1 and Treatment 2, nor between Treatment 2 and the Control group.

Results of the Sex Role Attitude Test designed to measure "liberality" in terms of students' perceptions of sex roles, revealed that females gave significantly more liberal responses than males when the post-test means were compared (Analysis of Covariance, $p < .01$). T-test results showed that a significant difference between pre- and post-test mean scores occurred among females, but not among males ($p < .001$). The treatment factor, on the other hand, did not demonstrate a significant main effect when post-test group means were compared;

however, the results of a t-test analysis revealed significant differences between the pre- and post-test mean scores for Treatment 2 ($p < .01$).

Results of an analysis of covariance of the Occupational Information Subtest (CMI) failed to reveal any significant differences between groups on the post-test measure. Similarly, analysis of within groups differences on pre- and post-test mean scores using the t-test technique, did not indicate significant results.

Discussion of Results

In this section, the results will be discussed in light of the four objectives of the formative evaluation outlined in Chapter III. The feasibility of the program goals adopted in this study will then be elaborated upon.

Objective #1: The majority of students involved in the two treatment programs enjoyed the experience and would like to see career awareness programs become part of their regular school curriculum. Their comments generally reflected the positive aspects of the learning experience; the majority perceived it as interesting, fun, and helpful in learning how to prepare for their futures. Their responses also suggested an increased awareness of affective living skills including understanding of cooperation, responsibility, trust, and respect for others. The students were able to generate helpful suggestions for program improvement. Among the more popular suggestions for improvement were the need for a longer time period, an opportunity to visit actual job sites, and more activities in conjunction with the film series. The nature of these comments appears to reinforce the students' expressed desire to see the program become part of their

regular curriculum.

The fulfillment of Objective #1 is of major importance to this study since it illustrates the fact that elementary students are not only interested in studying about the world of work, but are also capable of viewing themselves as potential, and indeed active members of the work force. This suggests that the study of work may have high motivational appeal for elementary school students. If it is incorporated with all other forms of educational motivation, students could learn more substantive content (Hoyt et al, 1973). The option of improving the program in order to test this hypothesis clearly remains viable, and indeed necessary, as long as educational research seeks to find more meaningful ways of presenting information to students.

Objective #2: Both of the teachers who observed the career awareness programs in progress agreed that program content was most suitable to the elementary school grades, and that there was a definite need for this type of program at this level. Suggestions for program improvement included expansion of the program over a longer time period, and the need to integrate the program into all subject areas. These observations are significant in that they support one of the major proponents of the career education movement, that being that the substantive content of career education and basic education skills can both be made meaningful to pupils if they are taught together (Hoyt et al, 1973; Bailey & Stadt, 1973; Mangum et al, 1977). The teachers' receptiveness to the program has direct implications for future research, not only in terms of expanding the program, but also for developing inservice programs for staff. Hansen (1974) has pointed out the importance of orienting staff to the career development concept, and to

ways of integrating it into the curriculum. The positive response elicited by these teachers suggests that career education inservice programs set up at this particular school would probably be well received.

From the group leaders' perspective, both programs were well organized and easily implemented. The author (Group Leader 2) felt that the "Bread & Butterflies" videotapes served as appropriate introductions to the major concepts of work, and provided for stimulating group discussion. However, the lack of activities in conjunction with the films resulted in a routine format which may have accounted for increased class disruptiveness on certain occasions. Group Leader 1 expressed the opinion that the high interest level perceived among her students was due, in part, to the wide variety of activities to which they were exposed. An implication for future research may, therefore, be to present the "Bread & Butterflies" films as introductions or supplements to a particular classroom activity.

Objective #3 (a): With the exception of two lessons, the students participating in the Career Awareness Program (Treatment 1) met the behavioral objectives of the individual lesson plans. In both the teachers' and the group leaders' opinions, outcomes of the objectives were easily observable and relevant to the goals of the program, thereby meeting the two major criteria of objective development (Jones et al, 1977; Sullivan & O'Hare, 1971). The two lessons that did not meet the intended outcomes were criticized for being poorly organized in the first case, and biased in terms of content in the second. Suggestions for re-organization can be found in Appendix H, under the appropriate lesson numbers.

In the author's opinion, it was difficult, at times, to ascertain whether or not the program objectives outlined in the "Bread & Butterflies" curriculum guide were met. Since time permitted for only fifteen minutes of discussion following the films, the topics were often not dealt with as fully as intended in the curriculum guide. The inclusion of supplementary activities and/or an increased time period would have allowed for a more accurate means of assessing intended program outcomes.

Objective #3 (b): In order to assess students' ability to perceive work roles in more liberal terms, the Sex Role Attitude Test was administered prior to and immediately following program implementation. The two treatment groups, when compared to the control group, did not show a significant increase in liberality toward sex roles as measured by this instrument. A possible explanation for this lack of significant difference may stem from the fact that, although both treatment programs dealt with the issue of sex roles on a general level, exercises dealing specifically with decreasing sex-typed thinking were not included. The one exception was Lesson 7 of the Career Awareness Program in which a film on stereotyping was presented; this lesson, according to the group leader, did not meet itsintended outcomes (Appendix H). Research into the area of sex role development indicates that sex-typed views of occupations are evident as early as kindergarten (Looft, 1971; Schlossberg & Goodman, 1972; Shepard & Hess, 1975) and are fairly well-established by the end of elementary school (Iglitzen, 1972; Schlossberg & Goodman, 1972; Tibbets, 1975; Crow, 1976). Thus, in order to have any impact on sex-role attitudes, a program must focus intensively on the issues of sex-typing and structure

exercises accordingly (Vincenzi, 1977).

A comparison of the pre- and post-test liberality scores of the three groups indicated that Treatment Group 2 made significant gains in liberality subsequent to participating in the program ($t=2.91$, $p < .01$). Although no specific exercises were directed toward sex-role awareness over the course of the program, the films did make every attempt to portray men and women in a variety of non-traditional work roles (eg. female engineers, male nurse) and to stress the equality of work roles around the home. The latter topic was discussed enthusiastically on several occasions in class and may have had an impact on the students' perceptions of sex role behavior. In comparison, Treatment 1 did not demonstrate any significant gains on post-test liberality scores compared to the pre-test administration, nor did the control group. As previously mentioned, Treatment 1 received only a film on stereotyping which was presented from a feminists' perspective. The group leader observed that many class members were opposed to the film because it was so heavily biased in favor of women; as a result, she did did not feel that the behavioral objectives of the lesson were met. Treatment 1, therefore, probably did not receive enough exposure to the topic to cause significant changes in views toward sex roles.

An analysis of the effect of sex on liberality scores indicated that females scored significantly higher than males on the post-test score comparison. Previous research has consistently supported this finding (Iglitzen, 1972; Shepard & Hess, 1975; Izenberg, 1978; Jack & Fitzsimmons, 1978). Shepard & Hess (1975) suggested that this trend may stem from the idea that women feel they personally have much to gain from changing sex role attitudes. The author observed during the

test administrations, that the girls in the sample tended to express more liberal opinions (eg. "girls can do anything") suggesting that these females may have been more responsive to information dealing with sex-role behavior. In addition, significantly higher differences between pre- and post-test liberality mean scores were observed for females ($t=3.94$, $p < .001$) but not for males ($t=.72$, $p > .05$), which further suggests that the females in this sample were willing to view sex-roles in a more liberal manner than were males.

Objective #3 (c): The students participating in the treatment programs did not express knowledge of a greater number of occupations as measured by the Occupational Information Subtest of the CMI. Neither within groups comparisons of pre- and post-test score means, nor between groups comparisons of post-test means revealed any significant differences on this measure. A possible explanation for this occurrence may be that the careers represented on the Occupational Information Subtest were not dealt with specifically during the course of the program. Therefore, in answering the questions, students had to rely either on the chance that they had had previous exposure to the particular occupation described or on guessing at the correct response.

Feedback from student evaluations did give some indication that increased awareness of certain occupations had occurred. For example, 56% of the students participating in the Career Awareness Program stated that they had enjoyed the guest speakers the most. Since part of the rationale behind including guest speakers in the program was to expose students to work roles that they might not otherwise come into contact with (Ewens et al, 1975), it seems likely that this group of students learned more about these careers than they would have

otherwise. Several students participating in the "Bread & Butterflies" program commented that they had particularly enjoyed learning about different jobs and that the exposure to new careers had given them ideas about their future. Therefore, it appears that Objective #3 (c) was at least partially fulfilled.

Objective #3 (d): Examination of the responses of the Questionnaire data indicated that the majority of the total sample (95%) were able to not only discuss their future career plans, but were also able to give clear reasons as to why they had made their choices. Thirty-four percent of the subjects did change their career aspirations on the psot-test, however, suggesting that career "choice" is still very transitory at this age (Ginzberg et al, 1951; Super, 1957; Hoppock, 1976). The students were also able to describe careers that they did not want to do. The children's ability to report their observations, interests, and disinterests as related to occupations demonstrates that they are aware of a wide variety of careers. This information provides the career educator with an empirical base for identifying occupations appropriate for classroom presentation (Goodson, 1970). Similarly, the information provided by the students in response to questions dealing with favorite home and school activities supplies clues for presenting career information in stimulating ways. For example, children may express an interest in art; as a classroom project they may be encouraged to draw or make a collage illustrating a particular occupation that they have researched. This type of approach enables them to further pursue an interest while simultaneously increasing their occupational information.

Students' understanding of specific occupational concepts was

determined by their responses to the "True/False" items on Part II of the Author's Questionnaire. Significant within groups differences were found for both treatment groups, but not for the control. Furthermore, results of the analysis of covariance revealed that a significant treatment effect had occurred. Since, in both treatment programs, the lesson themes revolved around specific occupational terms, it is likely that participation in the programs did have an effect on students' acquisition of such knowledge. A comparison of mean differences across the three groups indicated that Treatment 1 was significantly more effective in bringing about change than the control group (G1-G3, $F=3.94$, $p < .05$), but that it was not significantly more effective than Treatment 2. No significant differences were found in the mean differences between post-test scores of Treatment 2 and the control. A possible explanation for this occurrence may be due to differences in the treatment procedures. In Treatment 1, attempts were made at the outset of each lesson to identify the specific theme or occupational term to be discussed that day. Students were then involved in either simulated or real-life activities designed to demonstrate that particular occupational concept; they were also asked to record relevant information in their workbooks. A vicarious approach was taken in Treatment 2. The students' participation was limited to that of an observer, although they were given the opportunity to discuss the key occupational concepts following the videotape presentation. Hoyt et al (1973) have pointed out that the project-activity approach to career education instruction is most effective because of its high motivational value. In terms of the present study, it is likely that, while both Treatment 1 and Treatment 2 were effective in increasing

students' understanding of key occupational concepts, when each was compared with the control group, only the activity-oriented approach of Treatment 1 resulted in significant mean differences.

Objective #4: The Occupational Information Subtest of the Career Maturity Inventory represents one of the few standardized measures of occupational information (Crites, 1973). For this reason, it was chosen to assess students' acquisition of knowledge relating to different careers.. However, a review of the literature revealed a paucity of studies using this instrument with grade six samples, despite the fact that it has been standardized at this grade level. As a result, an objective of this study was to determine the suitability of the subtest as an instrument for measuring changes in occupational information at the grade 6 level.

Two previous studies used the total Competence Test of the CMI to assess the results of career education programs on grade six students' career maturity level (Omvig, Tulloch & Thomas, 1975; Omvig & Thomas, 1977). Neither study reported significant results on the Occupational Information subtest. The present study also failed to demonstrate significant gains on this measure. One explanation offered was that the items included on the test described occupations that were not dealt with in class. Consequently, students who had not been exposed to the careers described on the test would not be in a position to correctly name them. In regards to existing standardized instruments, Jones et al (1977) point out that "no matter how good the instrument [is], it will rarely lend itself perfectly to your particular setting ...[G]enerating your own instrument is usually a better choice" (p.32).

A second consideration in evaluating the suitability of the

Occupational Information Subtest has to do with the underlying assumptions and rationale behind the development of the C,I. Crites (1974) assumed that career maturity is a developmental variable that is systematically related to time. Accordingly, items were selected for the CMI only if they increased or decreased with time. The most meaningful measure of this factor was considered to be school grades. Therefore, the initial CMI item pool was standardized cross-sectionally in order to determine if items differentiated among the various grade levels during late childhood and adolescence. The resulting instrument consists only of items which are a monotonic function of grade. Thus, students at the grade 6 level, which was the lowest grade included in the standardization sample, obtained lower scores than students in higher grades presumably because their career maturity levels would not be as highly developed (Crites, 1974).

In terms of the present study, the students were exposed to career education programs for only an eight week period. Given that the Occupational Information Subtest is part of an instrument which purports to measure a developmental variable, it is unlikely that it would be sensitive enough to measure the effects of a short-term program on acquirement of occupational information. Studies by Flake et al (1975), Swails (1974), and Wolfe (1977) came to a similar conclusion.

In conclusion, the results of the Occupational Information Subtest of the CMI had very limited interpretative value in the present study because the item content did not relate to the material presented in class. Furthermore, because this subtest is included as part of an instrument designed to measure the developmental variable, career

maturity, it may not be an effective measure for change created by short-term career programs. Assessment of students' knowledge of different occupations could probably be better accomplished by devising one's own instrument.

Feasibility of Program Goals

Overall, the goals of the program outlined in Chapter III appeared to be feasible in terms of the facility with which they were implemented into the present program. Behavioral objectives, which reflected specific program goals, were met in 14 out of 16 cases. The exceptions were the lesson dealing with aptitudes, abilities, interests, and values, and the lesson on stereotyping. However, in the former case, results of the self-devised Questionnaire (post-test) revealed that generally students did appear to be able to differentiate among these terms (Part II) and to give personal examples of each. The students did not appear to develop more liberal attitudes toward sex role stereotyping in the working world. It appears that a more intensive program is needed in order to combat attitudes that may already be firmly developed. Subjective evaluations generally revealed that students had developed a greater awareness of the world of work and that they enjoyed learning about new and different jobs. Finally, a significant increase in the number of students who were able to describe specific educational requirements of their "chosen" career subsequent to treatment participation, suggests that these students were able to see the connection between school and the working world.

Recommendations

The following recommendations are offered as guidelines for future

research and program improvement:

1. The program should be expanded in duration to a minimum of half a year, and preferably, to a full school term.

2. Career education programs should be incorporated into the regular school curriculum.

3. Each lesson in the present study could conceivably be developed into a full two to three week unit. In expanding the program, every attempt should be made to integrate career education content into all subject areas.

4. The "Bread & Butterflies" series should be used in conjunction with an activity-based career education program. Videotape presentations could serve as introductions or supplements to individual units.

5. Students should be taken on field trips in order to get an actual idea of what the work site is like.

6. Guest speakers should be brought in at regular intervals.

7. Parents should be actively solicited as guest speakers, assistants on field trips, and as program planners.

8. The affective component (awareness of self) should be stressed throughout the program in order to promote personal growth.

9. Inservice training for teaching and counselling staff should be provided in order to orient them to the career development concept; staff should be encouraged to develop their own unique ideas for integrating career concepts into all subject matter.

10. Attempts should be made to develop reliable and valid instruments for assessing career awareness at the elementary school level.

11. Every attempt should be made to expose students to non-traditional role models beginning in the early elementary school grades.

Within the classroom, teachers should make conscious attempts to minimize sex-role behavior by assigning specific classroom jobs to members of both sexes.

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APPENDIX A

A CAREER AWARENESS PROGRAM
FOR GRADE 6 ELEMENTARY SCHOOL STUDENTS

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Lesson 1 - Introduction to Why We Work

Objectives

As a result of this lesson, students should be able to:

1. Explain why we need a good education
2. Define what they think a good job is
3. Differentiate between unskilled, skilled, semi-professional and professional jobs
4. Discuss how much education is needed to do the above listed types of jobs and what specific school subjects would be helpful
5. Identify what they might like to be when they grow up, and state reasons why

Procedure

1. Discuss the following questions:

a) "Why do you need a good education?" (To get a good job).

b) "What is a good job?" (enjoys the work, money, etc.)

c) "Tell me the names of some of the jobs that you know". Write them on the blackboard and divide them into 4 parts: unskilled, skilled, semi-professional and professional.

For example:

Unskilled	Skilled	Semi-Professional	Professional
Car Washer	Plumber	Store Manager	Teacher
Assembly Line Wkr.	Electrician	Car Salesman	Engineer
Janitor	Secretary	Computer Programmer	Doctor

d) Compare the jobs listed in the four categories, discussing such things as education or training needed, job satisfaction (what they like about these jobs).

2. Have students draw a picture of what they might like to be when they grow up. While drawing, ask them to think about WHY they want the job. Consider:

a) What is it about the job that you would like?
b) What wouldn't you like
c) Is it a daytime or nighttime job?
d) Is it a noisy or quiet job?
e) Will you work alone or with others?
f) How much education or training do you think you'll need

Lesson 2 - Learning About Me

Objectives

As a result of this lesson, students should be able to:

1. Identify school subjects that they are good at
2. Identify three things (other than school) that they are good at
3. Identify three things that they like to do and don't like to do
4. Identify three things that are important to them.
5. Define the terms "aptitude", "interest", "Ability", and "value"

Procedure

1. Discuss the following:
   a) "So far, we have discussed the amount of education people need to get certain jobs. Now, we are going to take a look at your education. You have learned many things. In some subjects you may do very well, in others not as well as you would like." Have the students write down the subjects that they are good at on one side of the page, and the ones that they don't like or have trouble with on the other.
   b) "When you're not in school, you probably like to do all kinds of interesting things like play soccer or take music lessons. What are some of the things that you like to do?" Ask children to write down three things they like to do and three things they don't like to do.
   c) "All of you have things that you are good at..." Ask them to tell about what they are good at - list in their books.
   d) "Does anybody know what the word 'aptitude' means?" (An aptitude is something that we have the potential to learn and understand). Use the same procedure for the following definitions"

      Interest - something that we like to do or want to learn more about

      Ability - something we are good at, something that we can already do

      Value - something that is important to us.

      Give examples as you define each word.

Lesson 3 - Interviewing Skills

Objectives

As a result of this lesson, students will be able to:

1. Formulate appropriate interviewing questions
2. Interview their parents about the kind of work they do.

Procedure

1. Discuss the following:
   a) "Every day you see grown-ups leaving their houses to go to work. Who leaves your house to go to work? Where do they work? What kind of work do they do? What kind of clothing do they wear?
   b) "What do you think your mom and dad like about their jobs?
2. Introduce the idea of interviewing their parents to find out more about their jobs. Let the students suggest the types of questions that they should ask. These should include the following:
   1. What is the title of your job?
   2. What are your working hours? Do you have to work at any other times?
   3. Where do you work?
   4. How does your work help our families or our community?
   5. What do you like best about your work?
   6. What do you like least about your work?
   7. Can both men and women do your job?
   8. How much education do you need to do this job?

Homework

Have the children interview a parent/sibling/friend and report results to the class tomorrow.

Lesson 4 - Reporting Results of Interviews

Objectives

As a result of this lesson, students should be able to:

1. Organize interview notes into a format for class presentation
2. Discuss results of interview with class
3. Describe a greater number of occupations as a result of listening to their classmate's reports
4. Describe the advantages and disadvantages of different careers and explain that a person's interests have something to do with the enjoyment of what s/he does.

Procedure

1. Ask for volunteers to present the results of their parent interview. Encourage students to comment or ask questions.
2. Ask students to describe some of the advantages and disadvantages of the different career descriptions they have heard.
3. Optional Activity:
   (a) draw a picture of how you think a particular career person would look on the job.
   (b) get together in small groups and discuss some of the careers presented in class. Try role-playing career situations.

Lesson 5 - Filling Out a Job Application

Objectives

As a result of this lesson, students should be able to:

1. recognize the need for Language Art skills (reading, writing) in applying for a job.
2. record relevant information (name, birthday, etc.) on the Form
3. write a brief paragraph describing their "qualifications"

Procedure

1. Materials needed:

   Each student will be supplied with a job application form, and a list of job descriptions.
2. Each child is to select a job from the list provided and fill in the job application form as if they have expertise in the job that they have selected.
3. Instructions:

   "We have talked a lot about the kind of work that people you know can do. We have heard about many jobs. Now we are going to pretend that you need a job and that I have the jobs you want. This job application will tell me something about you. Listen carefully so that you can follow my directions."
4. Go through the form step by step explaining the importance of being able to print neatly and spell correctly (relate this to making a good impression). On the section "Describe past work experience", ask students to refer to the Job Description Sheet to get information as to what people in this field might have done.
5. Have children discuss the importance of filling out the application correctly.

JOB APPLICATION FORM

JOB APPLIED FOR _____ DATE _____

NAME _____

HOME ADDRESS _____

TELEPHONE NUMBER _____

BIRTHDAY _____ (Month) _____ (Day) _____ (Year)

AGE _____

MALE/FEMALE (Circle)

SOCIAL INSURANCE NUMBER _____

HOW MUCH EDUCATION DO YOU HAVE? _____

_____

_____

_____

WHAT OTHER JOBS HAVE YOU DONE? _____

_____

_____

_____

_____

_____

WHY ARE YOU APPLYING FOR THIS JOB? _____

_____

_____

GIVE THE NAME , ADDRESS, AND PHONE NUMBER OF 2 PEOPLE WHO KNOW YOU WELL (OTHER THAN RELATIVES) AS REFERENCES FOR THIS JOB.

1. NAME _____

ADDRESS _____

PHONE NUMBER _____

2. NAME _____

ADDRESS _____

PHONE NUMBER _____

SAMPLE

AIRPLANE PILOT	An Airplane Pilot flies and lands planes carrying passengers, cargo and mail. Airplane pilots must be in excellent health, and must hold a Canadian Commercial Pilot's Licence. They should have Grade 12, be good in Math & Science and take flying lessons at a government approved school such as Mount Royal College in Calgary.
LAWYER	Lawyers work with people who need legal help either because they are in trouble with the law, or they are buying or selling a house or business, or they are having a will made up. To be a lawyer you must go to University for 5 or 6 years and then work for one year in a form of apprenticeship. After that year, you must pass an examination.
FORESTER	Foresters protect our environment by making sure that the forests are properly used. They may plan and supervise the cutting and planting of trees. They also protect trees from insects and diseases. Foresters fight forest fires and work on projects controlling floods. They may run programs to educate the public on the care of forests. Foresters learn their work through a 4 year University program with the Faculty of Agriculture and Forestry.
HAIR STYLIST	Hair Stylists are also called Beauticians and Cosmeticians. They may do any of all of the following: wash, cut and curl hair, give scalp treatments and facials, or clean and style wigs and hairpieces. Hair Stylists learn their work through the Apprenticeship Program, through technical schools or by training on the job. Each Hair Stylist in Alberta must be a registered apprentice or hold a journeyman certificate.
INTERIOR DECORATOR	Interior Decorators work at making our living, working and playing areas more attractive and useful. They plan the design of the inside of buildings and the arrangement of furniture. They must be creative, must know about materials and matching colours, lighting, and must be able to draw their plans. Interior Decorators learn their work through College or University programs.
VETERINARIAN	Veterinarians are animal doctors. They perform surgery, dress wounds, set broken bones, deliver baby animals, give innoculations against diseases and give advice to animal owners on feeding, breeding and care of animals. The only school of veterinary medicine in Western Canada is the Western College of Veterinary Medicine at the University of Saskatchewan in Saskatoon. This is a 4 year program and students must first have taken a two year pre-veterinary program available at the University of Alberta (Edmonton), the University of Calgary, or the University of Lethbridge
X-RAY TECHNICIAN	X-Ray Technicians operate the equipment which takes pictures of patient's bodies to help in the diagnosis of illness or injury. They position the patient and the equipment, process and develop different types of films, prepare drugs and chemical mixtures for patients and may do recorddkeeping and filing. X-Ray Technicians learn their work through a 2 year program offered jointly by the Northern Alberta Institute of Technology (NAIT) in Edmonton and a number of hospitals in Calgary, Edmonton and Red Deer.

Lessons 6, 8, 13, 14 - Guest Speakers

Tentatively scheduled are a chiropractor, a florist, a teacher, a radio announcer, and a station director.

Objectives

As a result of this lesson, students will be able to:

1. Describe what the guest speaker does, where s/he works, what made him/her decide to enter that career, and how much education is required.
2. Describe the interests that the person had and the abilities necessary to succeed in that occupation.
3. Ask appropriate interview questions.

Procedure

1. Introduce the guest speaker to the class.
2. Following their presentation, invite the students to ask questions.

Speakers may discuss:

- what they are
- what they do
- how they became interested in this career
- how many years of school it required
- where they work
- their working hours
- what they like and dislike about their jobs

Lesson 7 - Occupational Stereotypes

Objectives

As a result of this lesson, students will be able to:

1. Define what is meant by a "stereotype"
2. Give examples of stereotypes
3. Review and discuss magazine articles concerning women working at jobs traditionally sex-typed as masculine, and men at jobs traditionally sex-typed as feminine.

Procedure

1. Ask students if they know what a stereotype is.
2. Give examples such as "All redheads have bad tempers"; "Big boys never cry", "All women are lousy drivers".
3. Read some stories (articles) dealing with women working in jobs traditionally sex-typed as male, and about men in jobs traditionally sex-typed as feminine.

* Alternate - present a film on men and women in non-traditional roles

* The film used in this study was Male/Female: Changing Lifestyles, Educational Audio-Visual, 1974.

Lesson 9 - Quiz Game - "What's My Line"

Objectives

As a result of this lesson, students should be able to:

1. Further describe specific careers and the qualifications, conditions, etc. that it entails.

Procedure

As a result of previous lessons, students should have researched an occupation such that they are familiar with such things as working conditions, job requirements, educational requirements, etc. "What's My Line" gives students the opportunity to "stump" their classmates. The class asks the student "guest" questions that can be answered with a "yes" or "no" response. Typical questions may be "Do you work outside?" "Do you require a college education to do this job?" The class can ask a maximum of 20 questions in the attempt to identify the occupation of the guest. The teacher verifies the player's responses for scoring. Students win if the class is unable to identify their assumed occupation within the 20 question limit.

Lessons 10 and 11 - Goal Planning

Objectives

As a result of this lesson, students should be able to:

1. Discriminate between short-term and long-range goals
2. Identify two short-term goals and two long-range goals
3. Set up a goal-planning chart
4. Discriminate between accomplishments and goals.

Procedure

1. Discuss the following:

(a) "Have you ever thought of your life as a series of projects?"

Examples --

Things you have completed: Learning to walk, read, write, etc.
Things you are involved in now: Learning new skills at school.
Things you will be involved in in the future: choosing a career, going to college, travelling -- These are your GOALS.

-- Accomplishments and goals are almost the same thing -- the only thing that makes something an accomplishment at one point and a goal at another is whether or not it is in the past or future.

-- ACCOMPLISHMENTS are GOALS you have already done and succeeded at.
-- "Thing of something you have accomplished today"
-- "Think of something bigger that you have accomplished in the past three years."
-- What is the use of setting goals? Can you imagine your life without goals? (Nothing to work for, look forward to, etc.)
-- A goal is an end, a final destination.
-- Goals change from person to person
-- Goals can center on having something (clothes, money, toys) or on achieving something (finishing grade 6, learning how to play a song on the piano).
-- SHORT-TERM goals are things you can do pretty quickly e.g. making

phone calls tonight, finishing your homework, cleaning your room.)

-- LONG-RANGE goals are ones that you can start setting up now for a later time in your life: deciding what options to take in Junior High, saving money to buy something special.

Have the students write down and discuss two examples of each.

Lesson 11 - Goal Setting (continued)

2. Introduce the idea of keeping a Goal Chart:

MY GOALS	Short-Term	Long-Term
	When?	When?

"Now let's take a look at one of the goals you've set for yourself"(Ask for a volunteer from the class).

Goal_____

	YES	NO
1. Is this goal one you decided to set, or did someone else influence you to set it?		
2. Do you feel good about having set this goal for yourself?		
3. Does it seem like a realistic goal for you (one you can do)?		
4. Did setting this goal involve any conflict for you - did it make you mad, sad?		
5. Is risk-taking involved in reaching this goal?		
6. Did you talk to anyone else for advice before you decided on this goal?		

"How do people set goals?"

- make careful decisions
- decide which goals are most important
- this means taking risks, getting into situations that might be difficult.

Lesson 12 - The Cooperation Game

Objectives

As a result of this lesson, students should be able to:

1. Discuss the meaning of cooperation
2. Describe the feelings he or she experienced as a member of the group.
3. Describe some of the requirements for cooperation with a group.

   Examples: Everyone has to understand the situation
   Everyone needs to believe that he can help
   Instructions need to be clear
   Everyone must consider the other people involved as well as himself.

Procedure

1. Materials needed:

   Set of squares and instruction sheet for each five participants.

   Stiff paper

   Envelopes

2. Before class, prepare a puzzle set for every five students who will want to participate.
3. Begin by asking what cooperation means.

   List on the board some of the requirements for cooperation with a group. (Above).

   Describe the activity as a puzzle that can only be solved by using cooperation.
4. Divide the class into groups of five, and seat each group at a table equipped with a set of envelopes. Tell the players they may choose an envelope but may not open it until given a signal.
5. Explain the following instructions, and then read aloud the rules.

INSTRUCTIONS

Each player has an envelope containing pieces for forming squares. At a signal, everyone opens his envelope. The five people at each table begin trying to make five squares of equal size. The game is not complete until everyone has before him a perfect square and all the squares are the same size.

Cooperation Game (Continued)

RULES

No player may speak.

No player may ask for a card or in any way signal that he wants one.

Monitors may not speak to or signal players.

5. Give the signal to open the envelopes.

6. When all or most of the groups have finished, call time and discuss the experience.

DIRECTIONS FOR PUZZLE PREPARATION

A puzzle set consists of five envelopes, each containing three pieces of stiff paper cut into distinctive shapes. When properly arranged, the pieceswill form a 6" x 6" squares. There are other possible combinations which will form one or two squares; but only one arrangement will make five squares of equal size, as shown in the diagrams below.

DIRECTIONS

Number the five envelopes from 1 through 5 . Draw the five 6" squares and their divisions. Lightly pencil in the small letters noted below. Cut out squares. Cut the fifteen pieces and separate into five groups, each to be placed in an envelope as follows:

1. e.h.i
2. a,a,a
3. c,d,f
4. b,g,j
5. a,c,f

Erase penciled letters and replace with inked numbers showing in which envelope the pieces belong. Place puzzle pieces in envelopes.

Source: This game was reprinted courtesy of NTL Institute, Arlington, Va.

Lesson 15 & 16 - Planning Our Own Enterprise

Objectives:

As a result of this lesson, students should be able to:

1. Decide upon a suitable class enterprise
2. Organize themselves into work units, each with its own responsibilities
3. Discuss the importance of leadership, cooperation and respect at work
4. Identify the importance of the following jobs: the planners, the designers, the manufacturers, the distributors, the advertisers, and the sales clerks.

Procedure

1. Introduce the idea of the class forming its own enterprise. Possibilities include: a bakery, a post office, a manufacturing company (making their own "machine"), a grocery store.

2. Once the class decides upon a suitable project, introduce the various jobs necessary to run such an enterprise.These include:

a) Planners (President, Vice-President, Personnel Manager, etc.) who are responsible for organizing the enterprise, making sure that everyone gets along in order to maximize production, deciding upon wages, paying personnel.

b) Designers who study the most efficient means of producing the product, and outline what materials will be needed.

c) Manufacturers who actually make the product. Job specialization is introduced: each manufacturer has his/her own special job that is necessary in order to complete the final product.

d) Advertisers who design a company poster, write an advertising slogan, possibly make up a limerick or song to be taped on the "radio", and write newspaper ads.

e) Distributors who make sure that the product gets to the stores for selling to the public, and also inspect the product to make sure that it is safe for the consumer

f) Store clerks who sell the product to the class members and take in cash/ make correct change.

Divide the class into the various groups.

3. Discuss the importance of cooperating with each other both within groups and between groups.

Lesson 15 (16) - Running the Enterprise

Objectives

As a result of this lesson, students should be able to:

1. Perform their own jobs effectively
2. Work cooperatively with other members of the company
3. Review and discuss the importance of each job as well as the need to work cooperatively as a team in order to manufacture the product
4. Identifythe jobs involved in planning, advertising, manufacturing, instpecting and selling the product.

Procedure

Materials used:

Plan money,toy cash register, art materials (felt pens, poster paper, crayons, etc.), tape recorder

Manufacturing materials (to be decided upon by the students)

1. Let the class divide up into work groups and organize their work.
2. Allow them to work through the period.

NB - This session may extend into Lesson 16 depending upon the time required.

Optional Lesson Guest Speaker - A Retired Person

Objectives:

As a result of this lesson, students should be able to:

1. Describe the changes during the course of the speaker's work history.
2. Discuss the idea that interests change over time.
3. Discuss the idea of adaptability in work, i.e. that circumstances sometimes force us to make career changes.

Procedures:

1. Introduce the guest speaker
2. Invite students to ask questions afterward.

The guest speaker may discuss:

- family life as a child
- where s/he grew up
- his/her first paying job
- what s/he was doing between ages of 20 and 30 (job, interests, economic climate of the time)
- interests as a youth
- changes in career -- why did those changes take place
- what s/he is doing now that s/he is retired
- effects of the Depression and War on his/her career.

APPENDIX B

The "Bread and Butterflies" Program

APPENDIX B

"BREAD & BUTTERFLIES" PROGRAM

The "Bread and Butterflies" program was developed by the Agency for Instructional Television (1974) to promote career development in children between the ages of 9 and 12. It derives from the premise that "Career development, like social and physical development , should be a natural integral part of the school process....It is a process of student-centered learning, a development of student values and self-concepts, a way of giving children a glimpse of the adult world, a way of relating school to the needs of the student and the outside world" (Agency for Instructional Television, 1974 , p.6).

Eight broad goals of "Bread & Butterflies" are listed for the entire 15 programs:

1. Develop a clearer, more positive understanding of self - their interests, abilities, values, and interpretations of the events in their lives.
2. Exert greater control over their lives through decision-making and planning.
3. Develop personal and interpersonal skills and attitudes essential to success in school and work.
4. Develop greater respect for other people and the work they do.
5. Develop greater concept of successful work behavior - the attitudes, skills, and responsibilities demonstrated by successful working people.
6. Develop skills necessary to gather, process, and act upon information about self in relation to a constantly changing work environment.
7. Relate their immediate experiences and decisions to their evolving career development
8. See the connection between school and the real world; understand the relationship between what they learn in school and the problems and activities outside the school.

The goals are reflected with varying emphasis throughout the 15 lessons, but certain concepts within the goals are highlighted each lesson.

Thirteen lessons were available for the purpose of the present study. The following section outlines the program goals and objectives for each of the presentations shown.

Lesson 1 -Treasure Hunt

Goal: To help students explore the process of producing income and to help them discover ways in which they can achieve economic independence by participating in the economic system now and in the future.

Objectives: As a result of the lesson, students should:

- feel that they can earn money;
- understand personal and economic factors that influence making money;
- see that making money involves some risks, responsibilities, and effort.

Lesson 2 - Why People Work

Goal: To help students understand a variety of attitudes (including their own) toward work, and to explore the significance that work has for the development of individuals and society.

Objectives: As a result of the lesson, students should:

- learn more about why people work;
- understand their own feelings and satisfaction gained from work;
- understand that a person's career may satisfy personal needs not held by others;
- see that work and career include non-paying activities;
- understand the similarities between the work they do and adult work.

Lesson 3 - Me, Myself and Maybe

Goal: To help students increase clarification and acceptance of themselves, of their uniqueness and behavior, and of their evolving values and aspirations within the larger society.

Objectives: As a result of the lesson, students should:

- see how exploring values, interests and abilities can lead to a better understanding of self;
- increase their understanding of a variety of personal characteristics in themselves and others;
- be able to identify new abilities or interests that they might develop to expand their awareness of what they can do and of what interests them.

Lesson 4 - Relationship -- School, Work and Society

Goal: To help students investigate the similarities and differences between school learning and work activities, and to relate formal learning at school to present and future environmental and societal demands.

Objectives: As a result of the lesson, students should:

understand that adults use school subject skills to solve problems at work;

be able to list the attitudes and traits most often rewarded in school;

be able to list successful worker traits and attitudes and compare them with similar student behavior;

describe how one's relationship with others can affect performance and success in both school and work;

describe how decisions, rules, and procedures are characteristic of both school and work.

Lesson 4 - Interpersonal Skills

Goal: To help students identify and begin to develop the social skills that form the basis for present and future social interaction, work satisfaction, self-respect, and achievement.

Objectives: As a result of this lesson, students should:

identify personal characteristics that increase cooperation with classmates, parents, and teachers;

be able to describe individual characteristics that help a group get a job done and those characteristics that hinder getting a job done;

identify feelings that people might have when they work together;

identify ways that they can help other people and ways that other people help them.

Lesson 6 - What Is Success?

Goal: To help students explore both internal and external dimensions of success, to define success for themselves, and to project the possible implications their definitions of success might have for their several life roles.

Objectives: As a result of this lesson, students should:

recognize that a person can be successful without being rich and famous;

recognize that success means different things to different people;

recognize that few people experience success constantly;

recognize that people can achieve success in many different ways;

recognize how trying new things can help in discovering how a person can be successful;

understand what success means to them and why.

Lesson 7 - Life Styles

Goal: To help students explore the range of alternative life styles and to help them discover whether various career choices, and their associated non-work aspects, are in harmony with the life styles they might consider for the future.

Objectives: As a result of the lesson, students should:

be able to describe several differences in the way people live;

be able to identify areas of similarity and difference between several contrasting life styles;

identify some aspects of life styles that they find appealing;

understand that people sometimes have to compromise to achieve their desired life style.

Lesson 8 - Shaping One's Destiny

Goal: To help students increase the ability to establish, test, and modify short-term and long-term goals, and to help them understand how goal setting and planning increases the control they have over their own lives.

Objective: As a result of this lesson, students should:

be able to give examples of goal-oriented behavior;

be able to give examples of behavior demonstrated by people without goals;

express an understanding of one's ability and freedom to plan;

identify some of the rewards of planning;

understand that planning requires making choices about how to use one's time and resources.

Lesson 9 - People at Work

Goal: To help students explore the world of work, to broaden their understanding of how they relate to work, and to discover the similarities and differences among work roles.

Objectives: As a result of this lesson, students should;

be able to describe several of their own abilities and interests and name occupations where these interests and abilities can be an asset;

be able to describe the general characteristics of several occupations, some of the tasks performed by workers in those occupations, and some of the worker requirements of those tasks.

Lesson 10 - Interdependency of Workers

Goal: To help students understand how workers depend on each other to meet their physical, social, and psychological needs, and to help them increase the effectiveness of their interdependent relationships.

Objectives: As a result of the lesson, students should:

Understand that there are varying degrees of dependence, independence, and interdependence in personal relationships;

understand how working with others helps to meet certain physical, emotional, and social needs;

understand how working together requires trust and the ability to take instructions from others.

Lesson 11 - Human Dignity

Goals: To help students discover that dignity is found in the individual, not the job, and that any honest worker, regardless of the job he does, contributes to society in a way that benefits all.

Objectives: As a result of this lesson, students should:

recognize that dignity can come from a variety of sources;

understand how their respect for others relates to their own sense of dignity and worth;

recognize that dignity results more from how an individual feels inside than from what others think;

understand how work can give dignity to an individual;

understand that pride can come from being able to recognize your own achievements.

Lesson 12 - Power and Influence

Goal: To help students develop a concept of power and an awareness of their capabilities and potentials so that they can influence others and their world through their careers.

Objectives: As a result of this program, students should:

be able to describe the different kinds of power;

be able to describe their own reactions to different kinds of power;

be able to describe how someone in their lives uses power to influence others;

see how power can be abused, or used in ways that are beneficial to others;

state ways that they have used power;

Lesson 13 - Choosing Changes

Goal: To help students understand how workers depend on each other to meet their physical, social, and psychological needs, and to help them increase the effectiveness of their interdependent relationships.

Objectives: As a result of the lesson, students should:

understand that there are varying degrees of dependence, independence, and interdependence in personal relationships;

understand how working with others helps to meet certain physical, emotional, and social needs;

understand how working together requires trust and the ability to take instructions from others.

APPENDIX C

STUDENT EVALUATION FORMS

CAREER AWARENESS PROGRAM
EVALUATION FORM

1. Did you enjoy the Career Awareness Program? YES NO

2. If yes, why?

   If no, why not?

3. What parts of the program did you like the most?

4. Were there any parts of the program that you did NOT like?

5. Would you like to see this program become part of your regular school program? YES NO

6. What other things could be added to this program in the future to make it more interesting for grade six students?

BREAD & BUTTERFLIES PROGRAM
EVALUATION FORM

1. Did you enjoy the Bread & Butterflies film series? YES NO

2. If yes, why?

   If no, why not?

3. What did you learn from the program?

4. Would you like to see this program become part of your regular school program? YES NO

5. What other things could be done to make this program more interesting for grade six students?

APPENDIX D

QUESTIONNAIRE

ABOUT MY PLANS

Below are some questions about your future plans for work. Please answer each as well as you can.

NAME_____ AGE_____ ROOM_____

BOY/GIRL

1. What kind of work does your father do?

2. What kind of work does your mother do?

3. What kind of work do you want to do when you finish school?

4. Why do you want to do this kind of work?

5. How much education do you need to do this?

6. What kind of work would you NOT like to do?

7. Why would you NOT like to do this kind of work?

Below are some statements which are either TRUE or FALSE. Circle "T" if you think the sentence is TRUE, and "F" if you think it is FALSE.

1. Joey likes to play baseball. Someday he would like to be a pro baseball player. Playing baseball is one of Joey's interests.	T	F
2. Most people choose a job and stay in it all their lives.	T	F
3. Mary takes piano lessons, but is having trouble learning how to play the easiest song in her music book. Mary has an aptitude for playing the piano.	T	F

4. A person's values are best described as what he/she thinks are important. T F

5. Individuals differ in their attitudes, interests, aptitudes and abilities. T F

6. Jennifer would like to be a doctor someday because she wants to help people who are sick. Becoming a doctor is one of Jennifer's accomplishments. T F

7. The decisions that you make when you are young do not affect your later choices. T F

8. Terry took tennis lessons last spring and won his age group tournament. Learning how to play tennis is one of Terry's goals. T F

9. Individuals must be adaptable in a changing society. T F

10. Last week Mark finished a drawing for his art class. His teacher gave him an "A" on it and would like him to take professional art lessons. Drawing is one of Mark's abilities. T F

Below are some more questions about the kind of things that you like to do in your spare time. Please answer each as well as you can.

1. When I'm in school, I usually like _____
_____.

2. In my home or neighborhood, I usually like_____
_____.

3. One of my favorite hobbies is _____
_____.

4. What I've done that I feel especially proud of is_____
_____
_____.

5. Something I would like to do in the future is_____
_____
_____.

APPENDIX E

SEX ROLE ATTITUDE TEST

Name_____ ROOM_____

WHO SHOULD DO THESE JOBS?

Mark your choice with an "X"

	WOMEN	MEN	EITHER
1. Dishwasher			
2. Soldier			
3. Pilot			
4. Knit			
5. Iron Clothes			
6. Sewing			
7. Cashier			
8. Sell Perfume			
9. Vacuum			
10. Firefighter			
11. Go Fishing			
12. Telephone Operator			
13. Principal			
14. Horse Jockey			
15. Laundry			
16. Doctor			
17. Prime Minister of Canada			
18. Decorator			
19. Sportscaster			
20. Car Repair			
21. Telephone Installation			
22. Librairian			
23. Cheerleader			
24. Cook Supper			
25. Childcare			
26. Direct Traffic			
27. Secretary			
28. Plumber			
29. Nurse			
30. Bank Teller			
31. Lawyer			
32. Deliver Mail			
33. Dancer			
34. Truck Driver			
35. Hair Dresser			

APPENDIX F

RESULTS OF STUDENT EVALUATIONS

STUDENT EVALUATIONS

CAREER AWARENESS PROGRAM

1. Why did you enjoy the Career Awareness Programs?

   It helped me decide what to do when I grow up (1)*

   Guest speakers were good (2)

   Interesting (7)

   I learned about new jobs and what you have to do to get one (2)

   Fun (5)

   I liked how the group worked together (1)

   It was good for me (1)

   I think it will help us realize what a real job is and how much responsibility there is in having a job (1)

2. Why didn't you like the program?

   Boring(2)

3. What parts of the program did you like the most?

   Interviews with parents (2)
   The film (2)

   "What's My Line" game (2)

   Telling what kind of jobs we like and why (1)

   All of it (3)

   The jury (8)

   Guest speakers (13)

   Cooperation Game (2)

   Planning session for jury (1)

4. Were there any parts of the program that you did NOT like?

   All but the guests (1)

   Writing about the things I like (1)

   The jury (2)

   Not getting to speak as much as everyone else (1)

   No (13)

   The first lesson (1)

   People goofing around (1)

* Numbers in parentheses indicate the number of students making that response.

5. Suggestions for Improvement

More guest speakers (3)

Research a career (4)

Nothing could improve it (1)

More awareness games (1)

More information about the jobs we ask about (1)

More plays (4)

Field trips (2)

Longer time period (2)

More games (1)

STUDENT EVALUATIONS

"BREAD & BUTTERFLIES" PROGRAM

1. Why did you enjoy the series?

   Some films were funny (3)

   Interesting (7)

   Liked learning about working and different jobs (1)

   Makes you realize how to work with others (1)

   I learned alot from it (3)

   Better than language arts (1)

   It gave me ideas about my future (3)

   Educational (1)

   The films were good (1)

2. Why didn't you enjoy it?

   Some of the films were stupid (1)

   Interferes with my school work (1)

3. What did you learn from the program?

   How to plan my future (1)

   I learned about responsibility (1)

   I learned to know if I'd like a job and how I know if I can do it well (1)

   I learned to cooperate (10)

   I learned to trust other people if they're doing a job for you (1)

   How to communicate (1)

   A lot about jobs (1)

   I have to choose a job that is right for me (2)

   To take your time and go through more than one job (1)

   Respect people for what they do (1)

   Honesty (1)

Suggestions for Improvement

   Nothing (7)

   More time (3)

   More activities (5)

   More interesting films (2)

   More games, puppet shows (2)

   More projects with the films e.g. earning money: each student has a project to work on and earn money. (1)

APPENDIX G

TEACHER EVALUATIONS

TEACHER EVALUATION

CAREER AWARENESS PROGRAM

Interest Level - Very high

Content - Most appropriate

Curriculum - Definite need for this kind of program in the grade six program.

Addition to the Program - Exposure to actual work situations (field trips) would be interesting.

I am quite excited about this kind of program. I would like to see it run over a more extended period and to greater depths.

Thanks for running the program.

Bill Hanley

"BREAD & BUTTERFLIES" PROGRAM

TEACHER EVALUATION

9608 - 83 Street,
Edmonton, Alberta,
July 19, 1979.

Dear Susan:

I started my evaluation of the Bread and Butterflies Awareness Series in a sort of standard point form, but have decided to use a rambling approach which will better express my opinion. Many of the points overlap, so I hope you can pick out anything pertinent to your study since I decided not to undertake the task of separating them.

Firstly, I thought the series was extremely well done from all viewpoints. The selection and treatment of topics was handled skillfully from viewpoint of script, acting, and making the point. For this reason, the children found the series to be interesting. The fact that series is so contemporary in mood, music, and language is in its favor at the present time. There could be danger for its use in the future because of this however, since language and music tastes are so transitory for the young. At this point in time, the series does not talk down to young people in any way. For all of these reasons, I think Bread and Butterflies would appeal to students from Grade 5 through Junior High.

Secondly, I feel there is a place for the series in the school curriculum but it should be incorporated into other subject areas and classroom activities. For instance, in reading, there are stories in various reading series which have a similar theme. These stories could be compared to the film presentation for applicability to the problems presented, the various viewpoints of the characters, and so forth. These comparisons could be made through both discussion and writing techniques. In Social Studies, the cultural aspects as shown in the films could be compared with the cultural aspects of other societies being studied. Also, consideration could be given to changes in attitude from earlier times down to the attitudes espoused in the series.

The next improvement that I would consider is a lot of practice of the principles stated in the series. Concrete practice situations should be set up in the classroom in an on-going, daily interaction basis. Evaluation of progress should take place once a week or twice a month. In this concept, students would be expected to take more control of room procedures (including discipline methods), classroom clean-up and displays, field trips, and so on. The films would serve as an excellent referent for this co-operative, responsible behavior. The relationship between problem-solving interactions in the classroom to the problem-solving requirements of the vocational world could be constantly stressed.

Well, so much for the formal part of the evaluation! I did want to say that I was sorry that you often had to show the films under very adverse conditions which I felt made it difficult for you to make your points. In addition, the classroom was extremely loaded with other activities at the time you were there and it seemed they just couldn't get anything more together. This particular room was very fragmented this year and did not develop a really cohesive feeling. I say this so you will realize that your results could have been different under different circumstances. However, these are the facts in schools these days and the situation which you found is the reality.

Hope all this proves of value to you. Good luck!

Yours truly,

Clarence R. Adkins

P.S. If you want anything further, my number is 466-2337.

APPENDIX H

GROUP LEADER EVALUATION

APPENDIX H

GROUP LEADER EVALUATION

CAREER AWARENESS PROGRAM

Lesson 1 - Introduction to Why We Work

Student participation in this lesson was excellent.

The students showed interest in categorizing different jobs under the following headings: unskilled, skilled, semi-professional, and professional.

The students seemed to realize and accept the idea that all jobs can not easily be categorized under one of these headings; rather, they may be categorized under two different headings.

I felt that this was an excellent introduction lesson since it gave the students a concrete basis from which to work.

Objectives were met.

Lesson 2 - Learning About Me

This was not a good lesson - the whole lesson needs to be reorganized.

The students were at a loss as to the purpose of the lesson.

The students were confused because of the number of questions asked and the different directions from which the questioning evolved.

Definition of aptitude, interest, abilityy and value should be discussed first, then their own specific aptitudes, interests, abilities and values should be identified.

The students seemed confused and lost interest early in the lesson.

Objectives not met.

Lesson 3 - Interviewing Skills

This was a good lesson. The students seemed enthusiastic about discussing interviewing skills as soon as they heard that they would have a chance to use these skills the same day.

The whole class was involved in the discussion of appropriate interview questions.

The students cooperated with one another.

The students came up with appropriate interview questions as a group.

Objectives were met.

Lesson 4 - Reporting Results of Interviews - Learning About Other Occupations

There was full class participation, although approximately one third of the students did not do an interview themselves, they had the chance to ask questions of those who presented their interview report in front of the class.

This was an excellent lesson since the class worked as a group in discussing interview findings and criticizing the reporter.

The students seemed to enjoy this lesson.

Objectives were met.

Lesson 5 - Filling Out A Job Application

I felt that this was a good exercise since it made the child aware of the need for a good education as qualifications for a number of jobs.

The students enjoyed choosing a job to apply for and making up their previous job experience.

Several students had the opportunity to read aloud what they stated on their job application form.

Classmates were amused by some of the tall tales that job applicants dreamed up.

This was both an informative and enjoyable lesson; objectives were met.

Lesson 6 - Guest Speaker - Mr. Hanley - Teacher

Mr Hanley, the students home room teacher, talked for 15 minutes about he became a teacher and his job as a teacher.

He talked about the following:
- how he became interested in his career
- how many years of training it required
- what he liked and disliked about his job

Mr. Hanley gave the students a 15 minute question and answer period.

The students were very inquisitive.

Mr. Hanley spoke well.

Attention was high; questioning was appropriate.

Excellent lesson, objectives met.

Lesson 7 - Occupational Stereotypes

The students viewed a film strip on the changing role of women in our society.

The film was presented from a women's liberation point of view.

The film would have been more appropriate if it had presented the changing role of both men and women in our society.

The film could have dealt more effectively with "stereotyping".

The students listened and attentively watched the filmstrip.

After the film,was presented, the students effectively discussed their views on the changing role of men and women in our society.

The students were aware of what is meant by stereotyping at the end of the lesson.

Lesson 8 - Guest Speaker - Florist

One of the students mothers who is a florist talked to the class about her job. She talked for approximately twenty minutes on the following topics:

- how she became interested in this career
- what the advantages and disadvantages of her job are
- her working hours

There was a thirty minute question period.

All the students participated enthusiastically by listening attentively to the guest speaker and then asking appropriate questions.

The students were very interested in plants, particularly house plants and the questioning had to be eventually cut off because of the time factor.

The guest speaker presented each student with a small bouquet of flowers at the end of the presentation.

This was an excellent lesson - objectives were met.

Lesson 9 - "What's My Line"

Each student wrote on a piece of paper the name of a job.

The "guest" student tried to stump the class by only answering "yes" or "no" to their questions.

Each student had an opportunity to be either a score keeper or a "guest" student.

The students enjoyed this game and their questioning was very appropriate.

This was an excellent lesson.

The students liked this lesson so well that they asked if they could continue the game another time.

All of the students participated; objectives were met.

Lesson 10 - Goal Planning

Students listed three short-term goals of theirs.

Each student listed three long-term goals.

They were able to distinguish between accomplishments and goals.

Each student set-up his own goal-planning chart of two short-term goals.

Average lesson.

Lesson 11 - Videotape: Goal-Planning

This was a continuation of the previous lesson.

The students viewed a 15 minute videotape of a boy named Johnny who started on a project to build his own go-cart without setting up specific goals.

Johnny was seen as running into problems until he decided to set specific goals for himself. Johnny was then able to reach his final goal.

Students enjoyed the videotape.

Average lesson - Objectives met.

Lesson 12 - Cooperation Game

The students worked well as team members.

The students obeyed the rules of the game.

This was an excellent lesson in cooperation.

All the students participated with enthusiasm.

Excellent learning experience - Objectives met.

The students were asked to pretend that they were part of a team involved in making boxes. The exercise was effectively related to team work on the job.

Lesson 13 - Guest Speaker

Two guest speakers from a local radio station were asked to speak to the students.

One guest was a sales manager while the other was a news reporter.

The news reporter (Karen Brown) was extremely interesting and talked at the student's level.

She talked about the advantages and disadavantages of her career.

The students bombarded Karen with questions.

She was an excellent speaker.

The Sales Manager was not as effective as a guest speaker because he talked at an adult level.

The sales manager played commercial jingles for the students to identify and handed out station advertisements.

The time period was extended to one hour.

Lesson 14 - Guest Speaker - Chiropractor

Dr. Rick Elder was a very interesting guest speaker and very informative.

He showed X-rays of people with curved spines and compared these to normal spines.

Dr. Elder talked at an appropriate level and the students showd enthusiasm by asking several questions.

Excellent lesson - objectives met.

Lesson 15 - Planning an Enterprise

The purpose of this lesson was to have the students role-play the manpower needed in running a business.

This was the planning stage of the organization of a business - the students planned to be members of a courtroom. The following members were chosen through nomination and voting of all classroom members.

1. Judge
2. Suspect
3. Witnesses (3)
4. Lawyer
5. Prosecutor
6. Jury
7. Guard
8. Clerk
9. Audience

This lesson was very good; the students used a very democratic system for choosing members of the courtroom to carry out different jobs.

Lesson 16 - Running an Enterprise

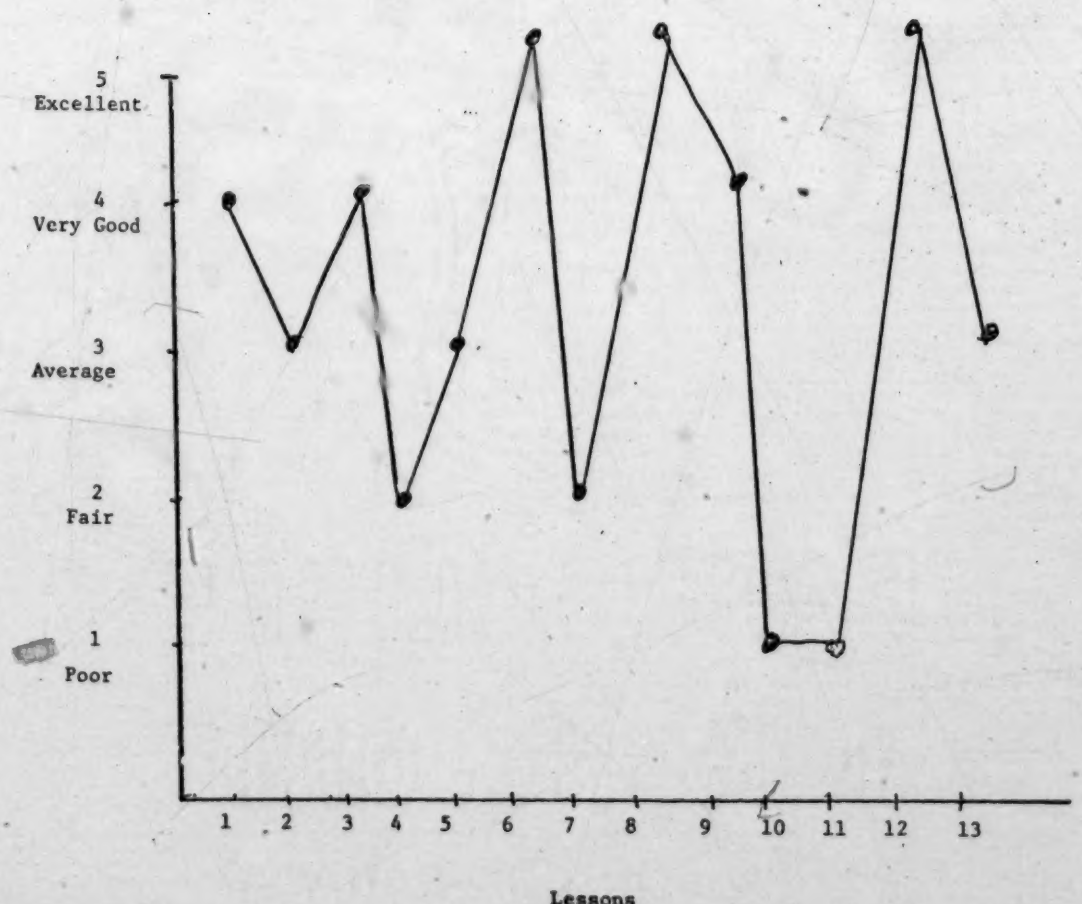
Objective: have students role-play the actual running of a business in order to become familiar with the team work that is involved in carrying out a successful business.

There was a mock courtroom. The judge called the court to order. The suspect was sworn in. The crown prosecutor and the lawyer questioned the suspect. Next the first witness was called to the stand and the lawyer and crown prosecutor cross-examined the witness. The second witness was then cross-examined. The jury met to pronounce the verdict. The verdict was not guilty due to lack of evidence.

The behavior of the students was loud and disorganized at times. However, they seemed very involved and enthusiastic in their role-playing. They seemed to enjoy the role-playing and I felt that they learned a great deal about the team work which is needed between different members in order to make the courtroom function as a court of law.

Objectives met.

FIGURE 1

AVERAGE STUDENT RATINGS OF VIDEOTAPES

BREAD & BUTTERFLIES PROGRAM